

Alcatel-Lucent 5620

SERVICE AWARE MANAGER | RELEASE 7.0

STATISTICS MANAGEMENT GUIDE

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Preface

About this document

The *5620 SAM User Guide* and *5620 SAM Parameter Guide* provide task-based workflows and user documentation to allow you to:

- use the GUI to perform tasks and maximize operator efficiency
- auto-discover and administer the 5620 SAM-managed network
- configure network devices
- configure and enable QoS and routing policies
- configure and enable customer services, such as VLL, IES, VPRN, and VPLS
- perform network fault management
- collect accounting and performance statistics

The *5620 SAM User Guide* uses a task-based format. Each chapter contains:

- overview information about the functionality described in the chapter
- a workflow that describes the steps for configuring and using the functionality
- a list of the GUI menus or commands related to the functionality
- a list of the procedures related to the functionality
- detailed procedures that list the configurable parameters on the associated forms

The *5620 SAM Parameter Guide* provides:

- parameter descriptions that include value ranges and default values
- parameter options and option descriptions
- parameter and option dependencies
- parameter mappings to the 5620 SAM-O XML equivalent property names

Procedure 1 To view *5620 SAM Parameter Guide* parameter descriptions from the *5620 SAM User Guide*

You can click on a parameter name in a *5620 SAM User Guide* procedure to open the matching parameter description in the *5620 SAM Parameter Guide*. Ensure the following conditions are true beforehand:

- the *5620 SAM Parameter Guide* and *5620 SAM User Guide* are located in and opened from the same directory
- Adobe Reader Release 5.0 or later is installed

1 To view a parameter description when the *5620 SAM User Guide* and the *5620 SAM Parameter Guide* are open:

   i Open the *5620 SAM User Guide* PDF using Adobe Acrobat.

   ii Open the *5620 SAM Parameter Guide* PDF using Adobe Acrobat.

   iii Click on a parameter name in a procedure in the *5620 SAM User Guide*. The parameter description is displayed in the *5620 SAM Parameter Guide*.

2 To view parameter descriptions when only the *5620 SAM User Guide* is open:

   i Open the *5620 SAM User Guide* PDF using Adobe Acrobat.

   ii Click on a parameter name in a procedure in the *5620 SAM User Guide*. The *5620 SAM User Guide* closes and the *5620 SAM Parameter Guide* opens to display the parameter description.

   iii Double-click on the Previous View button in Adobe Acrobat to re-open the *5620 SAM User Guide*. The *5620 SAM User Guide* opens and displays the parameter from step ii.

   iv Click on the parameter name from step ii. The parameter description is displayed in the *5620 SAM Parameter Guide*.

About related documentation

There are several documents that describe the 5620 SAM and the managed devices.

- See the *5620 SAM Planning Guide* for information about 5620 SAM scalability and recommended hardware configurations.
- See the *5620 SAM | 5650 CPAM Installation and Upgrade Guide* for information about installing the 5620 SAM database, server, and client software.
- See the *5620 SAM User Guide* for information about using the client GUI to perform network management functions.
- See the *5620 SAM Parameter Guide* for definitions, ranges, dependencies, and default values for configurable 5620 SAM client GUI parameters.
- See the *5620 SAM-O OSS Interface Developer Guide* for information about using the XML OSS interface to create OSS applications, for example, to perform alarm monitoring and inventory control.

- See the *5620 SAM Routine Maintenance Procedures Guide* for information about developing and scheduling regular maintenance activities.
- See the *5620 SAM System Architecture Guide* for information about software component interaction.
- See the *5620 SAM NE Compatibility Guide* for release-specific information about the compatibility of managed-device features with different 5620 SAM releases.
- See the *5620 SAM Statistics Management Guide* for information about managing 5620 SAM statistics collection and to view a list of the MIB counters that are available for collection using the 5620 SAM.
- See the index file in the User_Documentation directory on the application DVD for additional documentation information.

See the appropriate user documentation for information about device-specific CLI commands, parameters, and installation. Contact your Alcatel-Lucent support representative for information about specific network or facility considerations.

Procedure 2 To find the 5620 SAM user documentation

The user documentation is available from the following sources:

- the User_Documentation directory on the product DVD-ROM
- Help→5620 SAM User Documentation in the 5620 SAM client GUI main menu



Note — Users of Mozilla browsers may receive an error message when using the User Documentation Index page (index.html) to open the PDF files in the 5620 SAM documentation suite. The offline storage and default cache values used by the browsers are the cause of the error message.

Alcatel-Lucent recommends changing the offline storage (Mozilla Firefox) or cache (Mozilla 1.7) values to 100 Mbytes to eliminate the display of the error message.

Multiple PDF document search

You can use Adobe Reader Release 6.0 and later to search multiple PDF files for a common term. Adobe Reader displays the results in a single display panel. The results are grouped by PDF file, and you can expand the entry for each file.



Note — The PDF files in which you search must be in the same folder.

Procedure 3 To search multiple PDF files for a common term

1 Open Adobe Acrobat Reader.

2 Choose Edit→Search from the Acrobat Reader main menu. The Search PDF panel appears.

3 Enter the search criteria.

4 Click on the All PDF Documents In radio button.

5 Select the folder in which to search using the drop-down menu.

6 Click on the Search button.

Acrobat Reader displays the search results. You can expand the entries for each document by clicking on the + symbol.

Conventions used in this guide

Table 1 lists the conventions that are used throughout the documentation.

Table 1 Documentation conventions

Convention	Description	Example
Key name	Press a keyboard key	Delete
Italics	Identifies a variable	*hostname*
Key+Key	Type the appropriate consecutive keystroke sequence	CTRL+G
Key-Key	Type the appropriate simultaneous keystroke sequence	CTRL-G
↵	Press the Return key	↵
—	An em dash indicates there is no information.	—
→	Indicates that a cascading submenu results from selecting a menu item	Policies→Alarm Policies

Procedures with options or substeps

When there are options in a procedure, they are identified by letters. When there are substeps in a procedure, they are identified by roman numerals.

Example of options in a procedure

At step 1, you can choose option a or b. At step 2, you must do what the step indicates.

1 This step offers two options. You must choose one of the following.

   a This is one option.

   b This is another option.

2 You must perform this step.

Example of substeps in a procedure

At step 1, you must perform a series of substeps within a step. At step 2, you must do what the step indicates.

1 This step has a series of substeps that you must perform to complete the step. You must perform the following substeps.

   i This is the first substep.

   ii This is the second substep.

   iii This is the third substep.

2 You must perform this step.

Important information

The following conventions are used to indicate important information:



Warning — Warning indicates that the described activity or situation may, or will, cause equipment damage or serious performance problems.



Caution — Caution indicates that the described activity or situation may, or will, cause service interruption.



Note — Notes provides information that is, or may be, of special interest.

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66.1 5620 SAM statistics overview

The 5620 SAM provides a scalable platform for reliably collecting statistics from managed Alcatel-Lucent NEs and from 5620 SAM servers. The statistics are typically used for monitoring and troubleshooting the 5620 SAM network, and for SLA and billing functions performed by OSS applications that connect to the 5620 SAM.

You can use the 5620 SAM to view statistics data directly in tabular or graphical form, save the tabular or graphical data to a file in various formats, and export the statistics data to OSS applications using the 5620 SAM-O interface.



Note — The 5620 SAM statistics collection constraints must be considered when you configure statistics collection policies. See "5620 SAM statistics scalability" in section 66.3 for more information.

Before the 5620 SAM can collect statistics, policies must be configured to specify the following:

- the network or service objects from which to collect statistics
- the counters to collect
- the rate of collection
- the length of time that the 5620 SAM database retains the collected statistics

Collected statistics are viewable in the 5620 SAM GUI from the Statistics tab of an object properties form.

The 5620 SAM supports the collection of the following statistics:

- performance statistics
- accounting statistics
- server performance statistics

See "5620 SAM statistics types" for more information.

Performance and accounting statistics, which are NE-based, are collected by polling MIB counters or transferring accounting files from NEs. MIB statistics policies can be applied during or after NE discovery to enable the regular collection of performance statistics on the NE. Server performance statistics, which provide information about 5620 SAM server performance, are collected internally on each 5620 SAM server.

All statistics types, with the exception of file-based statistics, are available for on-demand collection and real-time graphical display. On-demand collection returns one MIB row for each click of the Collect button.

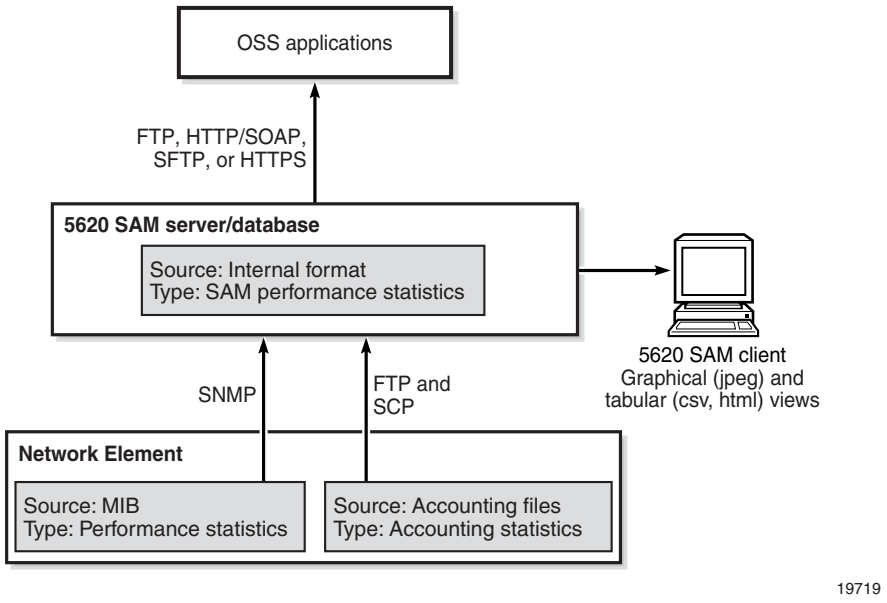
Scheduled and on-demand statistics are stored in the 5620 SAM database and are available to all 5620 SAM operators. Statistics collected for real-time display are available only for the duration of the session and for the operator that initiates the session. Real-time statistics are not stored in the 5620 SAM database.

Statistics are stored in the 5620 SAM database for a configurable period. The retention period is defined in a 5620 SAM statistics policy. When the retention period elapses, the statistics are removed from the database.

The 5620 SAM allows you to back up statistics data to another location. See chapter 18 of the *5620 SAM User Guide* for information about backing up the 5620 SAM database.

Figure 66-1 shows the flow of statistics from different sources to various consumers. On an NE, performance statistics are recorded in MIB tables, and accounting statistics are recorded in accounting files. The MIB-based statistics are collected by the 5620 SAM using SNMP. The statistics in the accounting files are transferred to the 5620 SAM by FTP or SCP. Server performance statistics are collected internally on a 5620 SAM server. All statistics types are stored in the 5620 SAM database. Statistics in the database can be viewed using the 5620 SAM GUI and are available to OSS applications. Statistics are transferred from the 5620 SAM database to the OSS applications using FTP or SFTP. Statistics displayed in the 5620 SAM GUI can be exported to files.

Figure 66-1 Statistics architecture



66.2 5620 SAM statistics types

Table 66-1 summarizes the characteristics of the different statistics types.

Table 66-1 Characteristics of statistics types

Characteristic	Statistics type		
	Performance	**Accounting** • service • network • subscriber • AA	**Server performance**
Typical use	NE troubleshooting and monitoring	Billing, SLA compliance, and trend analysis	5620 SAM server troubleshooting and monitoring
Source	NE MIBs	• service—NE XML files and MIBs • network—NE XML files and MIBs • subscriber—NE XML files and MIBs • AA—NE ISA-AA MIBs	Internal 5620 SAM data
On-demand collection (using the Collect or Collect All button)	Yes	No	Yes
Scheduled collection (minimum collection interval is 5 min)	Yes Configure a specific or general collection policy.	Yes Configure file and accounting policies.	Yes Configure a collection policy.
Real-time graphing • minimum interval is 10 s • Not stored in the 5620 SAM database	Yes	Yes, if MIB-based	Yes
Historical graphing	Yes	Yes	Yes
Available through 5620 SAM-O	Yes	Yes	Yes
Collection default	Off	Off	On, using 15-min interval

Performance statistics

Performance statistics counters record NE data, for example, physical equipment status and routing throughput, for monitoring and troubleshooting. See the appendices for a complete list of the available performance statistics counters.

Performance statistics counters are collected from NE MIBs using SNMP. These statistics can be scheduled for regular collection by the 5620 SAM server, or collected on demand.

Performance statistics are stored in the 5620 SAM database and can be graphically displayed in real time, or exported using the 5620 SAM-O interface. Historical performance statistics can be viewed in tabular or graphical form using the 5620 SAM client GUI.

Accounting statistics

Accounting statistics counters typically record service or subscriber usage data for billing or to ensure SLA compliance. See the appendices for a complete list of the available accounting statistics.

Accounting policies define the schedules that NEs use for the regular collection of accounting statistics. File policies specify how NEs store the accounting statistics data. An NE performs scheduled accounting statistics collection after a file policy and an accounting policy are deployed to the NE.

The 5620 SAM uses FTP or SCP to collect the accounting statistics files stored on NEs. See the appropriate device documentation for more information about accounting file storage on the device.

The supported accounting statistics types are:

- service accounting statistics—collected on every queue on every SAP that is linked to an accounting policy. Service accounting statistics provide queue throughput and drop information, and can be used for billing and SLA purposes.
- network accounting statistics—collected on every queue on every SDP, or collected on network ports that are linked to an accounting policy. Network accounting statistics measure forwarding class queue usage. This information is used to monitor link utilization, and to identify network traffic patterns and trends, for capacity planning and traffic engineering.
- subscriber accounting statistics—collected on a subscriber profile for residential subscriber instances. Subscriber accounting statistics are used for billing and SLA purposes.
- application assurance, or AA, accounting statistics—collected on applications, application groups, and protocols. See the *5620 SAM User Guide* for more information about AA accounting statistics.



Note — SDP statistics collection is supported only on devices that are in chassis mode B, C, or D. See the appropriate device documentation for more information about configuring the chassis mode.

You can customize the statistics record in a service, subscriber, or AA accounting policy by specifying the counters that are collected and the data thresholds for collection. See chapter 69 for more information about custom accounting records.

Accounting statistics are stored in the 5620 SAM database and can be exported using the 5620 SAM-O interface. The length of time that the 5620 SAM database stores accounting statistics is specified during 5620 SAM database installation. You can also change this retention period after installation. See chapter 18 of the *5620 SAM User Guide* for more information.

You can view historical and real-time accounting statistics in tabular or graphical form using the 5620 SAM client GUI.

Server performance statistics

You can collect server performance statistics such as the following from each 5620 SAM server in a 5620 SAM system:

- server statistics, which include memory usage and alarm counters
- network activity statistics, which include SNMP trap counters, accounting and SNMP polled statistic record counters, and NE resynchronization counters



Note — A 5620 SAM server records network activity that is visible to it; an NE may report a different level of activity during the same time period.

You can collect server performance statistics on demand, or schedule regular collection using a policy. Server performance statistics can also be collected and graphically displayed in real time, or exported using the 5620 SAM-O interface. Historical server performance statistics can be viewed in tabular or graphical form using the 5620 SAM client GUI.

66.3 5620 SAM statistics scalability

The 5620 SAM supports the large-scale collection of statistics from the managed network. Performance, accounting, and server performance statistics can be collected according to a schedule and are stored in the 5620 SAM database. The following formula defines the database capacity that scheduled collection consumes:

(number of objects to collect from) x (collection frequency) x (retention period)

The overall volume of collected statistics is limited by the size of the database. Therefore, the number of objects and collection frequency should be specified to meet operational requirements and remain within the database size constraints.

When a statistics collection policy or an accounting policy applies to a large number of objects, the collection interval must be long enough to collect all of the data during the collection period. If the statistics collection time exceeds the collection interval, the 5620 SAM raises an alarm.

The maximum number of statistics the 5620 SAM can collect is specified in the *5620 SAM Planning Guide*. To prevent statistics loss and 5620 SAM performance degradation, Alcatel-Lucent recommends that you stay within the specified maximum guidelines and ensure that each collection interval is long enough for the number of statistics to be collected during the interval.

5620 SAM statistics collection is greatly enhanced by adding an auxiliary server to the 5620 SAM system. The use of auxiliary servers distributes and load-balances the statistics collection workload among multiple servers to increase the volume and efficiency of statistics collection.

Real-time statistics collection and graphical display is supported for many network and service objects. A 5620 SAM client can open up to five real-time plotter windows, and each window can display up to four counters. If multiple open statistics plotters point to the same NE or the same object on an NE, the NE receives a large number of SNMP requests. Alcatel-Lucent recommends that you limit the number of open statistics plotters for the same NE. You can use a span of control to limit operator access to specific NEs and thereby reduce the number of simultaneous real-time collections from a specific NE.



Note — The 5620 SAM limits the number of active MIB-based accounting statistics plots per NE to four among all 5620 SAM clients. For example, when two 5620 SAM clients each have two active MIB-based accounting statistics plots associated with the same NE, no other client can open a plot of the same type for the NE.

Accounting statistics

If you need to collect large numbers of accounting statistics, for example, more than one million, Alcatel-Lucent recommends that you enable the statistics collection in a staggered manner. This helps to prevent the first-time collection delays associated with building the initial cache. For example, if you need to collect 6 million statistics in a 15–min interval, enable 500 000 statistics and wait until the interval completes before you add the next 500 000 statistics, and so on.

You can use custom accounting records to limit the processing requirements of service, subscriber, or AA accounting statistics collection. See chapter 69 for more information about custom accounting records.

The 5620 SAM uses FTP or SCP to retrieve an NE statistics file when the NE notifies the 5620 SAM of the new file. The 5620 SAM retrieves and processes the files in the order that it receives the notifications. An NE retains files only for the period specified in the file policy; after this period, the NE deletes the files. The statistics data in the files is lost if the files are not retrieved from the NE during this time.



Note — After an extended loss of connectivity to an NE that has an active accounting policy, the 5620 SAM resumes accounting statistics file retrieval by starting with the most recent statistics file.

When an accounting statistics counter is not supported by an NE or is excluded from collection using a custom record, the counter value is not included in a statistics record or displayed in the 5620 SAM client GUI.

Performance statistics

If any performance statistics remain to be collected at the end of a collection interval, they are skipped and the next collection begins. This results in lost statistics because the collection interval is too short.

66.4 5620 SAM statistics and OSS applications

The 5620 SAM can provide some or all collected statistics to OSS applications using the 5620 SAM-O interface. See chapter 74 for information about using the 5620 SAM-O interface to retrieve statistics data from the 5620 SAM.

Statistics collection configuration

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67.1 Statistics collection

The 5620 SAM can be configured to collect statistics counters from managed Alcatel-Lucent NEs and 5620 SAM servers. Statistics collection requires the configuration and deployment of various policies.

Statistics policies can be configured in the following ways:

- for an entire network, or top-down, using the forms available through the Tools→Statistics 5620 SAM main menu option
- for a specific object, or bottom-up, using the Statistics tab of an object configuration form

A 5620 SAM operator can create statistics collection policies only for NEs that are within the span of control of the current 5620 SAM user. However, an operator can view statistics from NEs that are not within the current span of control.

67.2 Statistics policy types

You can configure the following policy types for statistics collection:

- accounting policy—specifies the accounting record type and collection interval
- file policy—specifies the storage criteria for accounting statistics files on NEs
- statistics policy—specifies the storage criteria for statistics in the 5620 SAM
- MIB statistics policy—specifies the collection of MIB-based statistics counters from managed NEs, and is one of the following:
  - NE MIB statistics policy—applies to all NE objects of the specified type
  - specific MIB statistics policy—applies to a specific NE object
- server performance statistics policy—specifies the collection criteria for statistics related to 5620 SAM server performance

Table 67-1 lists the policies required for each statistics type.

Table 67-1 Statistics policies

Statistics type	Policy				
	Accounting	File	Statistics	MIB statistics	Server performance statistics
Accounting • service • network • subscriber • AA	✓	✓	✓	–	–
Performance	–	–	✓	✓	–
Server performance	–	–	✓	–	✓

Accounting policies

NEs collect accounting statistics using an accounting policy and an associated file policy that are assigned to a SAP, SDP, network port, or subscriber profile.

An accounting policy specifies an accounting statistics record type, a collection interval, an administrative state, and a file policy.

The 5620 SAM supports the following accounting policy types:

- service accounting policies—apply to SAPs, and specify the accounting records to collect for services
- network accounting policies—apply to network ports and SDPs, and specify the accounting records to collect for network resources
- subscriber accounting policies—apply to subscriber profiles and specify the accounting records to collect for residential subscribers
- AA accounting policies—apply to applications, application groups, and protocols, and specify the accounting records to collect for flows

An NE collects accounting statistics based on a specified collection interval and writes the statistics data in XML format to a file on the NE. After the rollover period specified in a file policy, the NE closes and compresses the file. The NE notifies the 5620 SAM that a new file is ready for processing, the 5620 SAM uses FTP or SCP to obtain the file from the NE, and adds the file contents to the 5620 SAM database. A third-party application can gather the statistics data and process it according to your specifications.



Note — To conserve NE and 5620 SAM resources, Alcatel-Lucent recommends that you disable an accounting policy on an object when statistics for the object are not required.

When an accounting policy is administratively disabled, accounting statistics data is not written to a file on the NE. When the accounting policy is re-enabled, the new accounting data represents traffic activity since the re-enabling of the policy. Because the statistics data accumulates in rolling counters, no information is lost.

You can customize the record in a service, subscriber, or AA accounting policy by specifying the counters that are collected and the data thresholds for collection. See chapter 69 for more information.

Changes to an accounting policy that is disabled apply immediately to all objects to which the policy is applied. Changes to an accounting policy that is enabled take effect at the beginning of the next collection period.

Consider the following before you configure an accounting policy.

- An accounting policy requires a file policy. If you deploy an accounting policy in the absence of a file policy, a default file policy is automatically created.
- For service and network accounting policies, there can be one default policy. Default accounting policies are not in effect until they are distributed to the NEs by the 5620 SAM operator.
- There is a one-to-many relationship between accounting policies and accounting objects. For example, one service accounting policy can apply to many SAPs, but a SAP can have only one service accounting policy.

File policies

A file policy specifies the relative size, storage location, and backup location of the files on the NE that contain accounting statistics data. An NE collects accounting statistics based on the collection interval specified for a SAP, network port, or subscriber in an accounting policy, and writes the statistics data in XML format to a file on the NE. After the rollover period specified in a file policy, the NE closes and compresses the file. The NE then notifies the 5620 SAM that a new file is ready for processing.

One file policy can be defined as a default policy and is automatically associated with an accounting policy if no file policy is specified.

Statistics policies

A statistics policy specifies a retention period and alarm thresholds for a statistics record. The retention period defines how long the 5620 SAM database retains the statistics record after collection, which affects the database storage requirements.

When statistics collection is enabled, the oldest statistics records are periodically removed from the database. When the collection interval is short and the retention period is long, more disk space is required to store the statistics data.



Note — You can configure the length of time that the 5620 SAM database globally retains accounting statistics data. See chapter 18 for information on configuring the accounting statistics data retention period.

MIB statistics policies

The collection of performance statistics from NEs is controlled by MIB statistics polices that specify an administrative state, polling synchronization start time, and collection interval. There are two types of MIB statistics policies:

- NE MIB statistics policies
- specific MIB statistics policies

Each type of MIB statistics policy contains a list of MIB entry policies. A MIB entry policy defines the collection criteria for a specific MIB row. In an NE MIB policy, a MIB entry policy applies to all objects on the NE that use the MIB entry. In a specific MIB policy, the MIB entry policy applies only to the specified objects on the NE. For example, the sapEgrQosPlcyQueueStatsEntry MIB entry applies to L2 and L3 SAPs. In an NE MIB statistics policy, selecting this MIB entry enables collection of the entry on all L2 and L3 SAPs on the NE. In a specific MIB statistics policy, selecting this MIB entry enables collection only on the selected L2 or L3 SAPs.

If the statistics collection time required for a MIB entry exceeds the collection interval specified in the MIB statistics policy, the 5620 SAM raises an alarm. A 5620 SAM operator can change the polling interval for a statistics class to prevent this. See chapter 68 for information about modifying polling criteria.

The collection of MIB statistics counters is disabled by default. See chapter 68 for information about enabling performance statistics collection.

NE MIB statistics policies

An NE MIB statistics policy defines the global collection of specific statistics on specific NEs, for example, the port statistics from all ports in a group of NEs. In such a collection scenario, configuring NE MIB policies rather than specific MIB policies is more efficient and uses fewer collection resources. Alcatel-Lucent recommends using NE MIB policies for general performance statistics collection on groups of NEs, and specific policies to enable or disable collection for specific NE objects.

After an NE MIB statistics policy is applied to an NE, statistics are collected for all objects on the NE, except for objects that have a specific MIB statistics policy. This prevents statistics from being collected twice—once by the NE MIB policy and once by the specific MIB policy.

Each NE requires an NE MIB statistics policy. The 5620 SAM has a default policy that it applies to an NE automatically when no NE MIB statistics policy is specified. The collection interval for each counter in the default policy is 15 min, and collection is disabled by default to conserve NE resources.

Specific MIB statistics policies

A specific MIB statistics policy defines the collection of selected performance statistics from specific objects on specific NEs to achieve a high statistics-collection granularity. For example, to collect port statistics at one rate for access ports and another rate for network ports, you can configure two policies that specify different collection intervals, and explicitly specify the access or network ports to which each policy applies. When a new access or network port is enabled, a 5620 SAM operator can add the port to the specific MIB statistics policy to enable statistics collection on the port.

The settings in a specific MIB statistics policy override the settings in an NE MIB statistics policy, and can be used to disable statistics collection for specific objects. For example, you enable statistics collection globally for an NE using an NE MIB statistics policy, and then disable the collection of specific statistics using a specific MIB statistics policy.

Server performance statistics policies

Server performance statistics provide information about 5620 SAM server performance. You can specify the type of server statistics that are collected and the collection interval for each type.

Each type of server performance statistic has the following:

- a collection policy that specifies a synchronization time and a collection interval
- a statistics policy that specifies the 5620 SAM database retention period

67.3 Statistics collection menus

Table 67-2 lists and describes the statistics collection menu items.

Table 67-2 5620 SAM statistics collection menu items

Menu item	Function
Tools→Statistics→MIB Policies	Configure a MIB statistics policy.
Tools→Statistics→Server Performance Statistics	View and modify server performance statistics and collection policies. View server performance statistics.
Tools→Statistics→Accounting Policies	Create a policy to manage accounting statistics collection.
Tools→Statistics→File Policies	Create a file policy for use with an accounting policy.
Tools→Statistics→Accounting Retrieval Status	View the accounting statistics collection status for an NE.
Manage→Services	Create a policy for accounting statistics collection on a SAP.
Policies→Application Assurance	View and modify AA protocol, application, and application group accounting statistics and collection policies. View and modify per-subscriber AA protocol, application, and application group accounting statistics and collection policies. View AA protocol, application, and application group statistics.
Manage→Residential Subscribers	Create a policy for the collection of accounting statistics on a subscriber. View per-subscriber AA protocol, application, and application group statistics.

68 — Performance statistics collection

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68.4 Performance statistics collection procedures *68-4*

68.1 Performance statistics collection overview

Performance statistics provide information about physical equipment, routing, and other NE properties for monitoring and troubleshooting purposes. See the appendices for a complete list of the performance statistics that are available to the 5620 SAM.

Performance statistics collection is enabled using a MIB statistics collection policy and associating the policy with one or more NEs or specific objects within the NEs, for example, ports. For greater efficiency and collection granularity, the following types of MIB statistics policies are available:

- NE MIB statistics policies—define collection at the NE level
  An NE MIB statistics policy contains a list of the MIB entry policies that are invoked for all objects on the NE.
- specific MIB statistics policies—define collection at the object level
  A specific MIB statistics policy contains the same list of MIB entry policies as an NE MIB statistics policy, but the MIB entry policies are applied only to the objects specified in the specific MIB statistics policy. A specific MIB statistics policy uses the concept of a monitored class, which is the type of object on which to collect statistics, for example, a port or service site. The monitored object instances must be specified in the specific MIB statistics policy. For example, if port is selected as the monitored object, then the actual ports in the network to which the policy applies must be specified, and become part of the policy.

Before the 5620 SAM performs a statistics collection based on a MIB statistics policy, it checks for duplicate collection requests, such as when the same object is included in an NE MIB policy and a specific MIB policy. If a duplicate is found, the 5620 SAM performs the collection on the object based on the specific policy rather than on the NE policy.

For performance reasons, Alcatel-Lucent recommends using NE MIB policies to collect statistics from all instances of an object on an NE, and specific policies to enable or disable collection for specific NE objects. This is a much more efficient use of NE resources than using a specific policy in which each object instance is specified. For example, you can configure an NE MIB policy to collect OSPF routing statistics on all the routing instances of the NE, and use a specific MIB policy to collect statistics on a subset of the routing instances.

Specific and NE MIB policies can operate together to streamline statistics collection. For example, to collect network port statistics at 5-min intervals and access port statistics at 15-min intervals, you can create an NE MIB policy for all ports with a 15-min collection interval and create a specific policy for network ports with a 5-min collection interval. At every third interval, when the two policy activations coincide, the NE policy is used and duplicate collection is prevented.

Specific MIB policy settings override NE MIB policy settings. Table 68-1 summarizes the specific policy overrides for an object.

Table 68-1 MIB statistics policy overrides

For a given object		
NE MIB policy	**Specific MIB policy**	**Action**
Collect	Collect	Statistic is collected once
Do not collect	Do not collect	Statistic is not collected
Collect	Do not collect	Statistic is not collected
Do not collect	Collect	Statistic is collected

NE MIB policies can be specified in NE discovery rules to ensure that statistics collection starts immediately after the NE is discovered. Specific MIB polices must be updated manually for specific objects on the new NE after it is discovered or new objects are created.

For top-down performance statistics configuration, choose Tools→Statistics→MIB Policies from the 5620 SAM main menu to systematically configure statistics for the network. For bottom-up performance statistics configuration, configure the MIB entry policy from the Statistics tab of the properties form for a specific object.

Generic NE performance statistics support

The 5620 SAM supports the collection of a limited set of statistics counters from standard system, interface, and routing MIBs on generic NEs. These statistics are processed and presented in the same manner as statistics from other devices. You can view generic NE statistics on the Statistics tab of a generic NE interface properties form, retrieve them using the OSSI, and display them graphically using the 5620 SAM Statistics Plotter.



Note 1 — To collect or view generic NE statistics from routing MIBs, you require a valid 5650 CPAM license that has a third-party router quantity greater than zero.

Note 2 — If persistent SNMP indexes are not enabled on a generic NE, one or more generic NE interface indexes may change after a generic NE reboots. This can cause a mismatch between the statistics records collected before the reboot and the current interface indexes. The 5620 SAM takes no action to recognize or correct such a mismatch.

68.2 Workflow for performance statistics collection

1. Configure the MIB statistics policy for NEs. See Procedure 68-1 for the top-down method. See Procedure 68-2 for the bottom-up method.
2. Configure the MIB statistics policy for specific objects. See Procedure 68-3 for the top-down method. See Procedure 68-4 for the bottom-up method.
3. Specify the MIB statistics policy polling interval. See Procedure 68-5 for more information.

4 Configure the statistics policy for an object. See Procedure 68-6 for more information.

5 If required, use a 5620 SAM client to view on-demand, scheduled, and real-time performance statistics. See chapter 71 for information about viewing statistics.

6 Use the 5620 SAM-O interface to retrieve the performance statistics records from the 5620 SAM for processing by a third-party application. See the *5620 SAM-O OSS Interface Developer Guide* for information about using the 5620 SAM-O to transfer statistics records from the 5620 SAM database to an OSS client application.

68.3 Performance statistics collection procedures list

Table 68-2 lists the procedures for collecting performance statistics.

Table 68-2 Performance statistics collection procedures list

Procedure	Purpose
To create or modify an NE MIB statistics policy using a top-down method	Configure an NE MIB statistics policy using 5620 SAM statistics management forms.
To modify an NE MIB statistics policy using a bottom-up method	Configure an NE MIB statistics policy using a 5620 SAM discovery rule.
To create or modify a specific MIB statistics policy using a top-down method	Configure a specific MIB statistics policy using 5620 SAM statistics management forms.
To create or modify a specific MIB statistics policy using a bottom-up method	Configure a specific MIB statistics policy using an object properties form.
To configure polling for a MIB statistics class	Specify the polling criteria for a MIB statistics class.
To configure a statistics policy for MIB statistics	Specify how the 5620 SAM manages the collected MIB statistics for a statistics class.

68.4 Performance statistics collection procedures

Use the following procedures to configure the collection of performance statistics using the 5620 SAM.

Procedure 68-1 To create or modify an NE MIB statistics policy using a top-down method

Perform this procedure to configure a policy for performance statistics collection on one or more NE MIBs using the NE properties form.

1 Choose Tools→Statistics→MIB Policies from the 5620 SAM main menu. The Manage MIB Statistics Policies form opens.

2 Choose NE MIB Statistics Policy (SNMP) from the object drop-down list.

3 Perform one of the following.

a Modify a MIB statistics policy.

i Specify a filter to create a filtered list of MIB statistics policies. A list of MIB statistics policies is displayed.

ii Choose a MIB statistics policy from the list and click on the Properties button. The NE MIB Statistics Policy (Edit) form opens.



Note 1 — When you change a MIB statistics policy for an NE, the change affects all of the NEs to which the policy is assigned.

Note 2 — When you change a MIB statistics policy for a statistics class of an object, the change applies to all objects that use the same statistics class.

b Click on the Create button to create a MIB statistics policy. The NE MIB Statistics Policy (Create) form opens.

4 Configure the parameters:

- Displayed Name
- Polling Synchronization Time
- Polling Admin State

5 Click on the Apply button. The form refreshes to display additional tab buttons.

6 Click on the Network Elements tab button.

7 Click on the Assign Sites button. A filter form opens.

8 Configure the filter criteria and click on the OK button. The Assign *policy_name* form opens with a list of NEs displayed.

9 Select one or more NEs from the Unassigned Sites list, and click on the right arrow button. The selected NEs move to the Assigned Sites list.



Note — You can also assign an NE MIB policy to NEs using a discovery rule. Doing this does not affect the previously discovered NEs. See Procedure 10-5 for more information.

10 Click on the OK button. The Assign *policy_name* form closes and the NE MIB Statistics Policy form reappears.

11 Close the NE MIB Statistics Policy form. The Manage MIB Statistics Policies form reappears.

12 Close the Manage MIB Statistics Policies form.

Procedure 68-2 To modify an NE MIB statistics policy using a bottom-up method

Perform this procedure to configure a policy for performance statistics collection on one or more NEs using the NE properties form.

1 Choose Administration→Discovery Manager from the 5620 SAM main menu. The Discovery Manager form opens.

2 Click on the Managed State tab button.

3 Choose an NE from the list and click on the Properties button. The Node Discovery Control (Edit) form opens with the General tab displayed.

4 Click on the MIB Statistics Policy tab button.

5 Click on the Select button. The Configure MIB Statistics Policy form opens.

6 Select a policy in the list and click on the OK button. The Configure MIB Statistics Policy form closes and the Node Discovery Control form reappears.

7 Click on the OK button. The Node Discovery Control form closes and the Discovery Manager form reappears.

8 Click on the OK button. A dialog box appears.

9 Click on the Yes button. The Discovery Manager form closes.

Procedure 68-3 To create or modify a specific MIB statistics policy using a top-down method

Perform this procedure to configure a policy for performance statistics collection on a specific NE MIB object using 5620 SAM main menu options.

1 Choose Tools→Statistics→MIB Policies from the 5620 SAM main menu. The Manage MIB Statistics Policies form opens.

2 Choose Specific MIB Statistics Policy (SNMP) from the object drop-down list.

3 Perform one of the following.

a Modify a MIB statistics policy.

i Specify a filter to create a filtered list of MIB statistics policies. A list of MIB statistics policies is displayed.

ii Choose a MIB statistics policy from the list and c. The Specific MIB Statistics Policy form (Edit) opens.



Note — When you change a MIB statistics policy for the statistics class of an object, the same changes apply to all other objects that use the same statistics class.

b Click on the Create button t o create a MIB statistics policy. The Specific MIB Statistics Policy (Create) form opens.

4 Configure the parameters:

- Auto-Assign ID
- Policy ID
- Displayed Name
- Polling Synchronization Time
- Polling Admin State

5 Click on the Select button. The Specific Stats Poller Policy form opens.

6 Choose an object type from the list and click on the OK button. The Specific Stats Poller Policy form closes and the Specific MIB Statistics Policy form reappears with the object type displayed in the Monitored Class Name field.

7 Click on the Apply button. The Specific MIB Statistics Policy form refreshes to display additional tab buttons.

8 Click on the Monitored Objects tab button.

9 Click on the Add button. The Select *monitored_object* for Specific MIB Statistics Policy form opens.

10 Configure the filter criteria and click on the Search button. A list of monitored objects is displayed.

11 Select one or more objects in the list and click on the OK button. The Select *monitored_object* for Specific MIB Statistics Policy form closes and the Specific MIB Statistics Policy form reappears with the selected objects listed.

12 Click on the OK button. The Specific MIB Statistics Policy form closes and the Manage MIB Statistics Policies form reappears.

13 Close the Manage MIB Statistics Policies form.

Procedure 68-4 To create or modify a specific MIB statistics policy using a bottom-up method

Perform this procedure to configure a policy for performance statistics collection on a specific NE MIB object using the object properties form.

1 Choose an object on which to configure the MIB statistics policy.

2 Right-click on the object and choose Properties from the contextual menu. The properties form for the object opens with the General tab displayed.

3 Click on the Statistics tab button.

4 Click on the Statistics Policies button and choose Manage Specific MIB Policy from the drop-down menu. The Manage Specific MIB Policy form opens.

5 Choose Specific MIB Statistics Policy (SNMP) from the object drop-down list.

6 Perform one of the following.

a Modify a MIB statistics policy.

i Specify a filter to create a filtered list of MIB statistics policies. A list of MIB statistics policies is displayed.

ii Choose a MIB statistics policy from the list and c. The Specific MIB Statistics Policy form (Edit) opens.



Note — When you change a MIB statistics policy for the statistics class of an object, the same changes apply to all other objects that use the same statistics class.

b Click on the Create button t o create a MIB statistics policy. The Specific MIB Statistics Policy (Create) form opens.

7 Configure the parameters:

- Auto-Assign ID
- Policy ID
- Displayed Name
- Polling Synchronization Time
- Polling Admin State

8 Click on the Select button. The Specific Stats Poller Policy form opens.

9 Choose an object type from the list and click on the OK button. The Specific Stats Poller Policy form closes and the Specific MIB Statistics Policy form reappears with the object type displayed in the Monitored Class Name field.

10 Click on the Apply button. The Specific MIB Statistics Policy form refreshes to display additional tab buttons.

11 Click on the Monitored Objects tab button.

12 Click on the Add button. The Select *monitored_object* for Specific MIB Statistics Policy form opens.

13 Configure the filter criteria and click on the Search button. A list of monitored objects is displayed.

14 Select one or more objects in the list and click on the OK button. The Select *monitored_object* for Specific MIB Statistics Policy form closes and the Specific MIB Statistics Policy form reappears with the selected objects displayed.

15 Click on the OK button. A dialog box appears.

16 Click on the Yes button. The Specific MIB Statistics Policy form closes and the Manage Specific MIB Policy form reappears.

17 Close the Manage Specific MIB Policy form.

18 Close the object properties form.

Procedure 68-5 To configure polling for a MIB statistics class

Perform this procedure to configure a policy for performance statistics collection for an NE MIB statistics class on an object.

1 Choose an object on which to configure the MIB statistics polling interval.

2 Right-click on the object and choose Properties from the contextual menu. The properties form for the object opens with the General tab displayed.

3 Click on the Statistics tab button.

4 Choose a statistics class from the object drop-down list.

5 Click on the Statistics Policies button and choose MIB Entry Policy from the drop-down menu. The MIB Entry Policy form opens with the General tab displayed.



Note — The MIB Entry Policy menu item is dimmed if you choose an invalid performance statistics class.

6 Configure the parameters:

- Polling Interval
- Administrative State
- Number of Varbind per PDU

7 Click on the OK button. A dialog box appears.

8 Click on the Yes button. The MIB Entry Policy form closes and the object properties form reappears.

9 Close the object properties form.

Procedure 68-6 To configure a statistics policy for MIB statistics

Perform this procedure to configure a policy for performance statistics collection on a MIB statistics class.

1 Choose the object on which to configure the statistics policy.

2 Right-click on the object and choose Properties from the contextual menu. The properties form for the object opens with the General tab displayed.

3 Click on the Statistics tab button.

4 Choose a statistics class from the object drop-down list.

5 Click on the Statistics Policies button and choose Statistics Policy from the drop-down menu. The Statistics Policy form opens with the General tab displayed.

6 Configure the parameters:

- Retention Time (hours)
- Administrative State
- Threshold Reporting State

7 Click on the Thresholds tab button. The Thresholds tab contains a threshold parameter for each counter in the statistics class.

8 Configure the threshold parameters. When a statistics counter threshold is exceeded, the 5620 SAM raises a threshold-crossing alarm. See the statistics tables in the appendices for a description of each statistics counter.

9 Click on the OK button. A dialog box opens.

10 Click on the Yes button. The Statistics Policy form closes and the object properties form reappears.

11 Close the object properties form.

69 — Accounting statistics collection

69.1 Accounting statistics collection overview *69-2*

69.2 Workflow for accounting statistics collection *69-3*

69.3 Accounting statistics collection procedures list *69-5*

69.4 Accounting statistics collection procedures *69-5*

69.1 Accounting statistics collection overview

Accounting statistics provide packet and octet throughput information for queues that are associated with the following objects:

- SAPs or SDPs, which provide service accounting statistics
- network ports, which provide network accounting statistics
- subscriber profiles, which provide subscriber accounting statistics
- subscribers, which provide application assurance, or AA, accounting statistics

See the *5620 SAM User Guide* for information about AA accounting statistics.

To collect accounting statistics, you need to create and apply the following:

- an accounting policy
- a file policy
- a statistics policy

See chapter 67 for a description of each policy type.

Queue filters

You can use the 5620 SAM to configure queue filters for accounting statistics so that NEs use queues that do not have to be monitored. The NEs generate accounting data files that include all of the configured queues. You specify the queue filter in the nms-server.xml configuration file on the 5620 SAM main server, and must restart the 5620 SAM main server or run the nmsserver.bat or .bash file using the read_config option.

When you configure a queue filter, the queue parameter is checked for each data record; the queues that do not match the filter are discarded and are not processed by the statistics collector. The corresponding values are not stored in the database and are not exported to files. By default, queues not matching the filter are processed by the statistics collector for statistics types.

For example, you can enable the processing of queues 1 and 2 from combinedServiceEgressOctets and completeSubscriberIngressPacketOctets, and queues 1, 2, and 3 for completeSubscriberEgressPacketOctets statistics classes by including the following entry in the nms-server.xml file:

```
<accountingStatsFilter

   combinedServiceEgressOctets="1,2"

   completeSubscriberEgressPacketOctets="1,2,3"

   completeSubscriberIngressPacketOctets="1,2" />
```

Custom accounting records

You can customize the record in an accounting policy to contain only the accounting data that you require. This reduces the statistics-collection processing load and the volume of data that collection generates. Custom accounting records allow you to specify the following in an accounting policy:

- the statistics counters to include in each record, for example, packet counters but not octet counters
- the queues to monitor for collection
- the following significant-change criteria that determine when an NE saves the counter data to a file:
  - a significant0change threshold
  - a specified set of reference counters
  - a specified set of reference queues
- override counters and queues that record data related to HSMDA scheduler overrides

The following accounting policy types support the creation of custom records:

- service
- subscriber
- application assurance, or AA

An accounting policy can contain one custom record. The 7710 SR, 7450 ESS, and 7750 SR, Release 7.0 or later, support the use of accounting policies that contain a custom record.

69.2 Workflow for accounting statistics collection

1. Ensure that FTP is enabled on the NEs from which you want to collect accounting statistics. See chapter 9 of the *5620 SAM User Guide* for information about device commissioning.
2. Configure poller policies to enable 5620 SAM FTP or SCP access to the NEs, as required. See chapter 10 of the *5620 SAM User Guide* for information about configuring poller policies.
3. Enable statistics collection on the appropriate object.
   a. For service and subscriber accounting statistics, ensure that statistics collection on the SAP to be monitored is enabled. See the appropriate access interface management chapter in the Managing subscriber services volume of the *5620 SAM User Guide*.
   b. For network accounting statistics, see the appropriate equipment management procedure in chapter 34 of the *5620 SAM User Guide*.
   c. For AA accounting statistics, see chapter 60 of the *5620 SAM User Guide*.
4. Configure a file policy with rollover and retention values that are appropriate for the traffic volume, number of objects, and available file storage space. See Procedure 69-1 for more information.

5 Configure an accounting policy. See Procedure 69-2 for more information.

6 Apply the accounting policy. You can apply one accounting policy to a SAP, SDP, network object such as a port, or a subscriber profile.



Note — Alcatel-Lucent recommends this method of applying an accounting policy rather than distributing the policy to NEs. The 5620 SAM distributes the policy to an NE when the policy is applied to an object.

a For service accounting statistics, apply the service accounting policy to a SAP or SDP.

i Administratively disable accounting on the SAP.

ii Choose the newly created accounting policy.

See the appropriate access interface management procedure in the Managing subscriber services volume of the *5620 SAM User Guide* for more information.

b For network accounting statistics, apply the accounting policy to a network object such as a port. You can specify a network accounting policy when you configure a port in network mode.

i Administratively disable accounting for the network object.

ii Choose the newly created accounting policy.

See the appropriate equipment management procedure in chapter 34 of the *5620 SAM User Guide* for more information.

c For subscriber accounting statistics, apply the accounting policy to a subscriber profile.

i Administratively disable accounting on the subscriber.

ii Choose the newly created accounting policy.

See the appropriate subscriber management procedures in the Managing subscriber services volume of the *5620 SAM User Guide* for more information.

d For AA accounting statistics, see chapter 60 of the *5620 SAM User Guide*.

7 Configure a statistics policy to define the retention requirements for the accounting statistics records.

a For service accounting statistics, see Procedure 69-3.

b For network accounting statistics, see Procedure 69-4.

c For subscriber accounting statistics, see Procedure 69-5.

d For AA accounting statistics per subscriber, see Procedure 69-6.

e For AA accounting statistics for an application, see Procedure 69-7.

f For AA accounting statistics for an application group, see Procedure 69-7.

g For AA accounting statistics for a protocol, see Procedure 69-9.

8 View the status of accounting statistics collection for NEs. See the appropriate procedure in chapter 17 of the *5620 SAM User Guide* for more information.

9 If required, use the 5620 SAM client to view accounting statistics. See chapter 71 of the *5620 SAM User Guide* for more information.

10 Use the 5620 SAM-O interface to retrieve the accounting statistics records from the 5620 SAM for processing by a third-party application.

See the *5620 SAM-O OSS Interface Developer Guide* for more information about using the 5620 SAM-O to transfer statistics records from the 5620 SAM database to an OSS client application.

69.3 Accounting statistics collection procedures list

Table 69-1 lists the procedures to collect accounting statistics.

Table 69-1 Accounting statistics collection procedures list

Procedure	Purpose
To create or modify a file policy	Specify how often a statistics file is created on a device and how long it is retained by the device before it is deleted.
To create or modify an accounting policy	Specify the types of statistics to collect and the collection frequency.
To configure a statistics policy for accounting statistics on a SAP or an SDP	Specify how the 5620 SAM manages accounting statistics on a SAP.
To configure a statistics policy for accounting statistics on a network interface	Specify how the 5620 SAM manages accounting statistics on a network interface.
To configure a statistics policy for accounting statistics on a subscriber	Specify how the 5620 SAM manages accounting statistics on a subscriber.
To configure a statistics policy for AA accounting statistics on a subscriber	Specify how the 5620 SAM manages AA accounting statistics on a subscriber.
To configure a statistics policy for an AA accounting statistics application	Specify how the 5620 SAM manages AA accounting statistics on an application.
To configure a statistics policy for an AA accounting statistics application group	Specify how the 5620 SAM manages AA accounting statistics on an application group.
To configure a statistics policy for an AA accounting statistics protocol	Specify how the 5620 SAM manages AA accounting statistics for a protocol.

69.4 Accounting statistics collection procedures

Use the following procedures to configure the collection of accounting statistics.

Procedure 69-1 To create or modify a file policy

Perform this procedure to configure a file policy that controls the management of accounting statistics files on one or more NEs.

1 Choose Tools→Statistics→File Policies from the 5620 SAM main menu. The Manage File Policies form opens.

2 Perform one of the following.

a To create a file policy, click on the Create button. The File Policy (Create) form opens.

b To modify a file policy, perform the following steps.

i Choose Local or Global from the Policy scope drop-down menu. When you choose Local, you can specify a device by clicking on the Select button and choosing a device from the list.

ii Click on the Search button. A list of file policies is displayed.

iii Select a file policy in the list and click on the Properties button. The File Policy (Edit) form opens.



Note — You cannot modify or delete a file policy when the policy is associated with an accounting policy that is administratively enabled. You must set the Administrative parameter of the corresponding accounting policy to Down before you can modify or delete the file policy. See Procedure 69-2 for more information.

3 Configure the parameters, as required:

- Auto-Assign ID
- ID
- Displayed Name
- Description
- Rollover (minutes)
- Retention (hours)
- Drive
- Storage Drive – Backup



Note — Ensure that the NE resources are sufficient to support the file policy and associated accounting policy specifications. The collection, retention, and rollover intervals must be appropriate, and the statistics must be regularly retrieved from the NEs.

4 Click on the Apply button. The File Policy form refreshes.

5 Click on the Switch Mode button. A dialog box appears.

6 Click on the Yes button. The configuration mode changes from Draft to Released.

7 Close the File Policy form. The Manage File Policies form reappears.

8 Close the Manage File Policies form.

Procedure 69-2 To create or modify an accounting policy

Perform this procedure to configure a policy that specifies the type and frequency of accounting statistics collection.

1 Choose Tools→Statistics→Accounting Policies from the 5620 SAM main menu. The Manage Accounting Policies form opens.

2 Perform one of the following.

a To create an accounting policy, click on the Create button. The Accounting Policy (Create) form opens with the General tab displayed.

b To modify an accounting policy, perform the following steps.

i Choose Local or Global from the Policy scope drop-down menu. When you choose Local, you can specify a device by clicking on the Select button and choosing a device from the list.

ii Click on the Search button. A list of accounting policies is displayed.

iii Select an accounting policy in the list and click on the Properties button. The Accounting Policy (Edit) form opens with the General tab displayed.

3 Configure the parameters:

- Auto-Assign ID
- ID
- Displayed Name
- Description
- Type
- Default
- Collection Interval (m)
- Use Default Interval
- Administrative

See Table 75-3 for descriptions of the Type parameter options.

4 Choose a file policy.

i Click on the Select button. The Select a File Policy form opens.

ii Choose an appropriate file policy.

iii Click on the OK button. The Select a File Policy form closes, and file policy name is displayed on the Accounting Policy form.



Note — A file policy with default parameter values is automatically created and associated with the accounting policy if a file policy not is specified. When a file policy is automatically created, verify that the file policy parameters are appropriate for the accounting policy.

5 Click on the Apply button. The Accounting Policy form refreshes.

6 Perform one of the following.

a If you choose Custom Record AA Subscriber for the Type parameter, go to step 7.

b If you choose Custom Record Service or Custom Record Subscriber for the Type parameter, go to step 8.

7 Perform the following steps.

i Click on the Custom Record tab button. The Significant Change Criteria tab is displayed.

ii Configure the parameters:

- Significant Change Delta
- Any

iii Click on the Application Assurance Counters tab button.

iv Configure the parameters:

- Application Assurance Counters
- From Subscriber Counters
- To Subscriber Counters

v Go to step 11.

8 Perform the following steps.

i Click on the Custom Record tab button. The Significant Change Criteria tab is displayed.

ii Configure the Significant Change Delta parameters.

iii Configure the parameters in the Reference Queue panel:



Note 1 — You can select all options for a parameter by clicking on the Select All button beside the counters.

Note 2 — You can deselect all options for a parameter by clicking on the Deselect All button beside the counters.

- All Queues
- Ingress Counters
- Egress Counters

iv If the All Queues parameter is enabled, go to step 7 vii.

v Click on the Select button below the All Queues parameter to choose a queue to monitor for the significant change. The Select Queue form opens.

vi Select a queue in the list and click on the OK button. The Select Queues form closes and the queue ID is displayed on the form.

vii Configure the parameters in the Reference Override panel:



Note 1 — You can select all options for a parameter by clicking on the Select All button beside the counters.

Note 2 — You can deselect all options for a parameter by clicking on the Deselect All button beside the counters.

- All Overrides
- Ingress Counters
- Egress Counters

viii If you do not enable the All Overrides parameter, go to step 9.

ix Click on the Select button below the All Overrides parameter to choose an override counter to monitor for the significant change. The Select Override form opens.

x Select an override in the list and click on the OK button. The Select Override form closes and the override ID is displayed on the form.

9 Perform the following steps.

i Click on the Queue Counter Config tab button.

ii Click on the Add button. The CustomQueueConfig (Create) form opens.

iii Configure the ID parameter.

iv Configure the Counters parameter in the Ingress panel.

v Configure the Counters parameter in the Egress panel.

vi Click on the OK button. A dialog box appears.

vii Click on the OK button. The Accounting Policy (Edit) form reappears.

10 Perform the following steps.

i Click on the Override Counter Config tab button.

ii Click on the Add button. The CustomOverrideConfig (Create) form opens.

iii Configure the ID parameter.

iv Configure the Counters parameter in the Ingress panel.

v Configure the Counters parameter in the Egress panel.

vi Click on the OK button. A dialog box appears.

vii Click on the OK button. The Accounting Policy (Edit) form reappears.

11 Click on the General tab button if the General tab is not currently displayed.

12 Click on the Switch Mode button. A dialog box appears.

13 Click on the Yes button. The configuration mode changes from Draft to Released.

14 Close the Accounting Policy form. The Manage Accounting Policies form reappears.

15 Close the Manage Accounting Policies form.

Procedure 69-3 To configure a statistics policy for accounting statistics on a SAP or an SDP

Perform this procedure to configure a policy that specifies the 5620 SAM database storage criteria for a specific class of accounting statistics on a SAP or an SDP.

1 Choose Manage→Services from the 5620 SAM main menu. The Manage Services form opens.

2 Specify a filter to create a filtered list of services and click on the Search button. A list of services is displayed.

3 Select a service in the list and click on the Properties button. The service properties form opens with the General tab displayed.

4 Click on one of the following tab buttons:



Note — The tab buttons that are displayed depend on the type of service that is chosen.

- L2 Access Interfaces
- L3 Access Interfaces
- Mesh SDP Bindings
- Spoke SDP Bindings

The properties form for the object opens.

5 Click on the Statistics tab button.

6 Choose a statistics class from the object drop-down list.

7 Click on the Statistics Policies button and choose Statistics Policy from the drop-down menu. The Statistics Policy form opens with the General tab displayed.

8 Configure the parameters:

- Retention Time (hours)
- Administrative State
- Threshold Reporting State



Note — If the Administrative State parameter is set to Down, accounting statistics for the selected statistics class type are not stored in the 5620 SAM database. The statistics cannot be viewed in the 5620 SAM GUI or exported to a 5620 SAM-O client using find or findToFile operations. However, if a 5620 SAM-O client registers using registerLogToFile, the accounting statistics data is exported to files.

9 Click on the Thresholds tab button. The Thresholds tab contains a threshold parameter for each counter in the statistics class.

10 Configure the threshold parameters. When a statistics counter threshold is exceeded, the 5620 SAM raises a threshold-crossing alarm. See the statistics tables in the appendices for a description of each statistics counter.

11 Click on the OK button. A dialog box appears.

12 Click on the Yes button. The Statistics Policy form closes and the object properties form reappears.

13 Close the object properties form. The service properties form reappears.

14 Click on the OK button. A dialog box appears.

15 Click on the Yes button. The service properties form closes and the Manage Services form reappears.

16 Close the Manage Services form.

Procedure 69-4 To configure a statistics policy for accounting statistics on a network interface

Perform this procedure to configure a policy that specifies the 5620 SAM database storage criteria for a specific class of accounting statistics on a network interface.

1 Choose Routing from the navigation tree view selector.

2 Navigate to the required network interface.

3 Right-click on the interface icon and choose Properties from the contextual menu. The Network Interface (Edit) form opens with the General tab displayed.

4 Click on the Statistics tab button.

5 Choose a statistics class from the object drop-down list.

6 Click on the Statistics Policies button and choose Statistics Policy from the drop-down menu. The Statistics Policy form opens with the General tab displayed.

7 Configure the parameters:

- Retention Time (hours)
- Administrative State
- Threshold Reporting State



Note — If the Administrative State parameter is set to Down, accounting statistics for the selected statistics class type are not stored in the 5620 SAM database. The statistics cannot be viewed in the 5620 SAM GUI or exported to a 5620 SAM-O client using find or findToFile operations. However, if a 5620 SAM-O client registers using registerLogToFile, the accounting statistics data is exported to files.

8 Click on the Thresholds tab button. The Thresholds tab contains a threshold parameter for each counter in the statistics class.

9 Configure the threshold parameters. When a statistics counter threshold is exceeded, the 5620 SAM raises a threshold-crossing alarm. See the statistics tables in the appendices for a description of each statistics counter.

10 Click on the OK button. A dialog box appears.

11 Click on the Yes button. The Statistics Policy form closes and the Network Interface form reappears.

12 Close the Network Interface form.

Procedure 69-5 To configure a statistics policy for accounting statistics on a subscriber

Perform this procedure to configure a policy that specifies the 5620 SAM database storage criteria for a specific class of accounting statistics on a subscriber.

1 Choose Manage→Residential Subscribers from the 5620 SAM main menu. The Manage Residential Subscribers form opens.

2 Choose Residential Subscriber Instance from the object drop-down list and click on the Search button. A list of residential subscriber instances is displayed.

3 Select a residential subscriber instance in the list and click on the Properties button. The Residential Subscriber Instance form opens with General tab displayed.

4 Click on the Statistics tab button.

5 Choose a statistics class from the object drop-down list.

6 Click on the Statistics Policies button and choose Statistics Policy from the drop-down menu. The Statistics Policy form opens with the General tab displayed.

7 Configure the parameters:

- Retention Time (hours)
- Administrative State
- Threshold Reporting State



Note — If the Administrative State parameter is set to Down, accounting statistics for the selected statistics class type are not stored in the 5620 SAM database. The statistics cannot be viewed in the 5620 SAM GUI or exported to a 5620 SAM-O client using find or findToFile operations. However, if a 5620 SAM-O client registers using registerLogToFile, the accounting statistics data is exported to files.

8 Click on the Thresholds tab button. The Thresholds tab contains a threshold parameter for each counter in the statistics class.

9 Configure the threshold parameters. When a statistics counter threshold is exceeded, the 5620 SAM raises a threshold-crossing alarm. See the statistics tables in the appendices for a description of each statistics counter.

10 Click on the OK button. A dialog box appears.

11 Click on the Yes button. The Statistics Policy form closes and the Residential Subscriber Instance form reappears.

12 Close the Residential Subscriber Instance form.

13 Close the Manage Residential Subscriber Instance form.

Procedure 69-6 To configure a statistics policy for AA accounting statistics on a subscriber

Perform this procedure to configure a policy that specifies the 5620 SAM database storage criteria for a specific class of AA accounting statistics on a subscriber.

1 Choose Manage→Residential Subscribers from the 5620 SAM main menu. The Manage Residential Subscribers form opens.

2 Choose Residential Subscriber Instance from the object drop-down list and click on the Search button. A list of residential subscriber instances is displayed.

3 Select a residential subscriber instance in the list and click on the Properties button. The Residential Subscriber Instance form opens with General tab displayed.

4 Click on the Statistics tab button.

5 Choose an AA statistics class from the object drop-down list.

6 Click on the Statistics Policies button and choose Statistics Policy from the drop-down menu. The Statistics Policy form opens with the General tab displayed.

7 Configure the parameters:

- Retention Time (hours)
- Administrative State



Note — If the Administrative State parameter is set to Down, accounting statistics for the selected statistics class type are not stored in the 5620 SAM database. The statistics cannot be viewed in the 5620 SAM GUI or exported to a 5620 SAM-O client using find or findToFile operations. However, if a 5620 SAM-O client registers using registerLogToFile, the accounting statistics data is exported to files.

8 Click on the OK button. A dialog box appears.

9 Click on the Yes button. The Statistics Policy form closes and the Residential Subscriber Instance form reappears.

10 Close the Residential Subscriber Instance form.

11 Close the Manage Residential Subscribers form.

Procedure 69-7 To configure a statistics policy for an AA accounting statistics application

Perform this procedure to configure a policy that specifies the 5620 SAM database storage criteria for a specific class of AA accounting statistics on an AA application.

1 Choose Policies→Application Assurance from the 5620 SAM main menu. The Manage Application Assurance Policies form opens.

2 Choose Application Group Policy from the object drop-down list and click on the Search button. A list of application group policies is displayed.

3 Select a policy in the list and click on the Properties button. The global Application Assurance Group Policy (Edit) form opens with the General tab displayed.

4 Click on the Local Definitions tab button.

5 Select a local policy definition in the list and click on the Properties button. The local Application Assurance Group Policy (Edit) form opens with the General tab displayed.

6 Click on the Applications tab button.

7 Select an application in the list and click on the Properties button. The Application (Edit) form opens with the General tab displayed.

8 Click on the Statistics tab button.

9 Click on the Statistics Policies button and choose Statistics Policy from the drop-down menu. The Statistics Policy form opens.

10 Configure the parameters:

- Retention Time (hours)
- Administrative State



Note — If the Administrative State parameter is set to Down, accounting statistics for the selected application are not stored in the 5620 SAM database. The statistics cannot be viewed in the 5620 SAM GUI or exported to a 5620 SAM-O client using find or findToFile operations. However, if a 5620 SAM-O client registers using registerLogToFile, the accounting statistics data is exported to files.

11 Click on the OK button. A dialog box appears.

12 Click on the Yes button. The Statistics Policy form closes and the Application (Edit) form reappears.

13 Close the Application (Edit) form.

14 Close the local Application Assurance Group Policy (Edit) form.

15 Close the global Application Assurance Group Policy (Edit) form.

16 Close the Manage Application Assurance Policies form.

Procedure 69-8 To configure a statistics policy for an AA accounting statistics application group

Perform this procedure to configure a policy that specifies the 5620 SAM database storage criteria for a specific class of AA accounting statistics on an AA application group.

1 Choose Policies→Application Assurance from the 5620 SAM main menu. The Manage Application Assurance Policies form opens.

2 Choose Application Group Policy from the object drop-down list and click on the Search button. A list of application group policies is displayed.

3 Select a policy in the list and click on the Properties button. The global Application Assurance Group Policy (Edit) form opens with the General tab displayed.

4 Click on the Local Definitions tab button.

5 Select a local policy definition in the list and click on the Properties button. The local Application Assurance Group Policy (Edit) form opens with the General tab displayed.

6 Click on the Application Groups tab button.

7 Select an application group in the list and click on the Properties button. The Application Group (Edit) form opens with the General tab displayed.

8 Click on the Statistics tab button.

9 Click on the Statistics Policies button and choose Statistics Policy from the drop-down menu. The Statistics Policy form opens with the General tab displayed.

10 Configure the parameters:

- Retention Time (hours)
- Administrative State



Note — If the Administrative State parameter is set to Down, accounting statistics for the selected application group are not stored in the 5620 SAM database. The statistics cannot be viewed in the 5620 SAM GUI or exported to a 5620 SAM-O client using find or findToFile operations. However, if a 5620 SAM-O client registers using registerLogToFile, the accounting statistics data is exported to files.

11 Click on the OK button. A dialog box appears.

12 Click on the Yes button. The Statistics Policy form closes and the Application Group (Edit) form reappears.

13 Close the Application Group (Edit) form.

14 Close the local Application Assurance Group Policy (Edit) form.

15 Close the global Application Assurance Group Policy (Edit) form.

16 Close the Manage Application Assurance Policies form.

Procedure 69-9 To configure a statistics policy for an AA accounting statistics protocol

Perform this procedure to configure a policy that specifies the 5620 SAM database storage criteria for a specific class of AA accounting statistics on an AA protocol.

1 Choose Policies→Application Assurance from the 5620 SAM main menu. The Manage Application Assurance Policies form opens.

2 Choose Local from the Policy scope drop-down menu.

3 Specify a device by clicking on the Select button and choosing a device from the list.

4 Choose Application Assurance Protocol from the object drop-down list and click on the Search button. A list of protocols is displayed.

5 Select a protocol in the list and click on the Properties button. The Application Assurance Protocol (Edit) form opens with General tab displayed.

6 Click on the Statistics tab button.

7 Click on the Statistics Policies button and choose Statistics Policy from the drop-down menu. The Statistics Policy form opens with the General tab displayed.

8 Configure the parameters:

- Retention Time (hours)
- Administrative State



Note — If the Administrative State parameter is set to Down, accounting statistics for the selected protocol are not stored in the 5620 SAM database. The statistics cannot be viewed in the 5620 SAM GUI or exported to a 5620 SAM-O client using find or findToFile operations. However, if a 5620 SAM-O client registers using registerLogToFile, the accounting statistics data is exported to files.

9 Click on the OK button. A dialog box appears.

10 Click on the Yes button. The Statistics Policy form closes and the Application Assurance Protocol (Edit) form reappears.

11 Close the Application Assurance Protocol (Edit) form.

12 Close the Manage Application Assurance Policies form.

70 — Server performance statistics collection

70.1 Server performance statistics collection overview *70-2*

70.2 Workflow for server performance statistics collection *70-2*

70.3 Server performance statistics collection procedures list *70-2*

70.4 Server performance statistics collection procedures *70-2*

70.1 Server performance statistics collection overview

Server performance statistics are collected from the 5620 SAM main servers in a 5620 SAM system. To collect server performance statistics, you need to create and apply the following policies:

- statistics policy
- server performance collection policy

See chapter 67 for more information about the policies.

70.2 Workflow for server performance statistics collection

1 Configure the statistics policy associated with the statistics data. See Procedure 70-1 for more information.

2 Configure the server performance collection policy that is associated with the statistics data. See Procedure 70-2 for more information.

3 Delete statistics records, as required. See Procedure 70-3 for more information.

70.3 Server performance statistics collection procedures list

Table 70-1 lists the procedures to collect server performance statistics.

Table 70-1 Server performance statistics collection procedures list

Procedure	Purpose
To configure a statistics policy for server performance statistics	Specify how the 5620 SAM manages server performance statistics.
To configure a statistics collection policy for server performance statistics	Specify polling and collection policies for server performance statistics classes and counters.
To delete statistics records	Delete collected statistics records.

70.4 Server performance statistics collection procedures

Use the following procedures to configure the collection of server performance statistics.

Procedure 70-1 To configure a statistics policy for server performance statistics

Perform this procedure to create a policy that specifies the storage criteria for 5620 SAM server performance statistics. You can create one statistics policy for each type of statistics counter.

1 Choose Tools→Statistics→Server Performance Statistics from the 5620 SAM main menu. The Server Performance Statistics form opens.

2 Choose one of the following statistics classes from the object drop-down list:

- Alarm Rate (SAM Performance Statistics)—counters related to 5620 SAM alarms
- Node Resync (SAM Performance Statistics)—counters related to NE resynchronizations
- SNMP Trap (SAM Performance Statistics)—counters related to NE SNMP traps
- Server Memory (SAM Performance Statistics)—counters related to 5620 SAM server memory usage
- Statistics Collection (SAM Performance Statistics)—counters related to accounting and performance statistics collection

3 Click on the Statistics Policy button. The Statistics Policy form opens with the General tab displayed.

4 Configure the parameters:

- Retention Time (hours)
- Administrative State
- Threshold Reporting State

5 Click on the Thresholds tab button. The Thresholds tab contains a threshold parameter for each counter in the statistics class.

6 Configure the threshold parameters. When a statistics counter threshold is exceeded, the 5620 SAM raises a threshold-crossing alarm. See section 169.1 in the *5620 SAM Parameter Guide* for a description of each threshold parameter.

7 Click on the OK button. A dialog box appears.

8 Click on the Yes button. The Statistics Policy form closes and the Server Performance Statistics form reappears.

9 Close the Server Performance Statistics form.

Procedure 70-2 To configure a statistics collection policy for server performance statistics

Perform this procedure to create a policy for the collection of 5620 SAM server performance statistics. You can create one collection policy for each statistics policy.

1 Choose Tools→Statistics→Server Performance Statistics from the 5620 SAM main menu. The Server Performance Statistics form opens.

2 Choose one of the following statistics classes from the object drop-down list:

- Alarm Rate (SAM Performance Statistics)—counters related to 5620 SAM alarms
- Node Resync (SAM Performance Statistics)—counters related to NE resynchronizations
- SNMP Trap (SAM Performance Statistics)—counters related to NE SNMP traps
- Server Memory (SAM Performance Statistics)—counters related to 5620 SAM server memory usage
- Statistics Collection (SAM Performance Statistics)—counters related to accounting and performance statistics collection

3 Click on the Collection Policy button. The Collection Policy form opens.

4 Configure the parameters:

- Administrative State
- Polling Synchronization Time
- Collection Interval

5 Click on the OK button. A dialog box appears.

6 Click on the Yes button. The Collection Policy form closes and the Server Performance Statistics form reappears.

7 Close the Server Performance Statistics form.

Procedure 70-3 To delete statistics records

Perform this procedure to remove one or more server performance statistics records from the 5620 SAM database.

1 Choose Tools→Statistics→Server Performance Statistics from the 5620 SAM main menu. The Server Performance Statistics form opens.

2 Choose one of the following statistics classes from the object drop-down list:

- Alarm Rate (SAM Performance Statistics)—counters related to 5620 SAM alarms
- Node Resync (SAM Performance Statistics)—counters related to NE resynchronizations
- SNMP Trap (SAM Performance Statistics)—counters related to NE SNMP traps
- Server Memory (SAM Performance Statistics)—counters related to 5620 SAM server memory usage
- Statistics Collection (SAM Performance Statistics)—counters related to accounting and performance statistics collection

3 Click on the Statistics Policy button. The Statistics Policy form opens with the General tab displayed.

4 Click on the Purge Statistics Records button. The Statistics Policy filter form opens.

5 Use the filter form to narrow the search for specific statistics records.

6 Click on the OK button. A dialog box appears.

7 Click on the Yes button. The Statistics Policy filter form closes, and the records are deleted from the database. The Statistics Policy form appears.

8 Close the Statistics Policy form. The Server Performance Statistics form reappears.

9 Close the Server Performance Statistics form.

Statistics presentation

71 — Statistics presentation overview

72 — Viewing statistics

73 — Graphing statistics

74 — Using the 5620 SAM-O to collect statistics

71 — Statistics presentation overview

71.1 Statistics presentation *71-2*

71.1 Statistics presentation

You can view all statistics types that the 5620 SAM supports in tables or graphs. Tables list specific values, and the table data can be sorted, filtered, and exported to files in different formats. Graphs help to identify trends, and can display multiple statistics counters simultaneously. A graph can have multiple independently scaled axes that allow a 5620 SAM operator to visually compare statistics with high numbers, such as throughput statistics, to statistics with very low numbers, such as dropped packet statistics. You can export graphs to files using different file formats.

There are two methods of specifying the statistics to present in a table or graph.

- bottom-up method—applies to performance and accounting statistics, and involves navigating to the object on which the statistics are collected, such as a SAP, SDP, or network port
- top-down method—applies to all statistics types, and involves opening a browser form using the Tools→Statistics Browser option in the 5620 SAM main menu

  You can display statistics from multiple objects in one list using a filter, choose a specific statistics type, filter on a specific object, and view the statistics in a table.

Tabular statistics view

Statistics for a single object are viewable in the Statistics tab of the object properties form. Each displayed statistics class corresponds to a MIB table or to an accounting file on the NE. When a collection policy is applied, the list is populated with rows of statistics that are collected from the MIBs or accounting files specified in the policy.

You can also collect network and server performance statistics on demand by clicking on the Collect button in the Statistics tab. The MIB associated with the selected statistics type is polled and one row appears in the statistics list. The record type is On-Demand, which indicates that the row is not collected using a collection policy.

The Collect All button collects one on-demand statistics record for each statistic type that the object supports. This is useful for collecting different types of statistics at the same time.

On-demand collection is not available for accounting statistics. Accounting statistics are available only in the 5620 SAM after an NE transfers an accounting statistics file to the 5620 SAM.

The top section of a statistics tab contains a drop-down menu of statistics classes for the object, and a filter that you can configure to limit the number of listed statistics, for example, statistics collected during a specific time period. You can open a listed entry to display a Statistics Record form that lists each counter and value, and contains details about the record collection.

You can quickly sort a list of statistics by clicking on a list column heading, for example, Time Captured or Record Type, and can customize the sorting by right-clicking on the list heading and choosing Show Sorting from the contextual menu.

You can export the statistics list to a file by right-clicking on the list heading and choosing Save to File from the contextual menu.

Graphical statistics view

Statistics can be viewed in a graph using the 5620 SAM statistics plotter. The plotter can display multiple performance, accounting, and server performance statistics simultaneously using dual axes. The plotter also provides a numerical value for each point on the graph.

Each 5620 SAM client can open up to five statistics plotters, and each plotter can simultaneously plot up to four counters. Plotters can have independent Y axes on the left and right sides of a graph, and any counter can be assigned to one of the Y axes.

A plotter can plot real-time or historical statistics. Historical plots use statistics from earlier collections that are stored in the 5620 SAM database. The plotter automatically plots all of the stored values for the specified counter. Real-time plots collect statistics while the plotter window is open and plot the data as it is collected.

For real-time statistics, when multiple 5620 SAM clients each have multiple open plotters that are displaying multiple counters, a high volume of statistics is collected from the NEs. If the collection for many of the plotters is from the same NE, the NE is polled independently for each plotter, which may affect performance. You can use a scope of command role to limit plotter access to specific 5620 SAM user groups.

Performance statistics are collected from NE MIBs and converted to periodic values. Accounting statistics are collected, filtered, as required, for example, by queue ID for network ingress objects, and converted to periodic values. The 5620 SAM calculates periodic values by subtracting the previous counter value from the current counter value. Periodic data is typically more useful than raw counter values for troubleshooting and trend analysis.

72 — Viewing statistics

72.1 Viewing statistics overview 72-2

72.2 Workflow for viewing statistics 72-2

72.3 Viewing statistics menus 72-2

72.4 Viewing statistics procedures list 72-2

72.5 Viewing statistics procedures 72-3

72.1 Viewing statistics overview

Statistics can be viewed as numerical data in a table, which is useful for obtaining raw counter values. The tabular data can be sorted, filtered, and exported to files in different formats.

AA statistics can be viewed from the Statistics tab of a local AA policy object, such as an application, application group, or protocol.

72.2 Workflow for viewing statistics

1 Monitor on-demand performance statistics. See Procedure 72-1 for more information.

2 Monitor statistics for sets of objects. See Procedure 72-2 for more information.

3 Monitor scheduled collection for the following statistics types, as required:

- performance—see Procedure 72-4 for more information
- service accounting—see Procedure 72-6 for more information
- specific-object—see Procedure 72-3 for more information
- subscriber accounting—see Procedure 72-7 for more information
- AA accounting—see Procedures 72-7 through 72-11 for more information

4 Monitor 5620 SAM server performance statistics using the GUI. See Procedure 72-5 for more information.

72.3 Viewing statistics menus

Table 72-1 lists the statistics data viewing menus and their functions.

Table 72-1 Statistics data viewing menus

Menu option	Function
Tools→Statistics Browser	To view statistics records and policies
Manage→Services	To view service accounting statistics
Manage→Residential Subscribers	To view subscriber accounting statistics and AA accounting statistics per subscriber
Policies→Application Assurance	To view AA accounting statistics
Tools→Statistics→Server Performance Statistics	To view server performance statistics

72.4 Viewing statistics procedures list

Table 72-2 lists the procedures for viewing statistics data.

Table 72-2 Statistics data viewing procedures list

Procedure	Purpose
To view on-demand statistics	Display on-demand statistics.
To view statistics for a set of objects	Display statistics for multiple objects.
To view performance statistics	Display scheduled performance statistics.
To view service accounting statistics	Display scheduled service accounting statistics.
To view network accounting statistics	Display scheduled network accounting statistics.
To view subscriber accounting statistics	Display scheduled subscriber accounting statistics.
To view per-subscriber AA accounting statistics	Display scheduled AA accounting statistics for a subscriber.
To view AA accounting statistics for an application	Display scheduled AA accounting statistics for an application.
To view AA accounting statistics for an application group	Display scheduled AA accounting statistics for an application group.
To view AA accounting statistics for a protocol	Display scheduled AA accounting statistics for a protocol.
To view server performance statistics	Display server performance statistics.

72.5 Viewing statistics procedures

Use the following procedures to view statistics data.

Procedure 72-1 To view on-demand statistics

Perform this procedure to collect and display the statistics values in a current statistics record.

1 Open the properties form of the object for which you want to view statistics. The General tab is displayed.

2 Click on the Statistics tab button.

3 Choose a statistics class from the object drop-down list.



Note — The Collect and Collect All buttons are not displayed when you choose a statistics class that does not support on-demand statistics collection.

4 Specify a filter to create a filtered list of statistics records, if required.

5 Perform one of the following.

a Click on the Collect button to collect the statistics for only the specified class.

b Click on the Collect All button to collect statistics for all classes.

The statistics records are displayed in a list.

6 Identify a statistics record to view.

7 Perform one of the following.

a Scroll horizontally to view the statistics counter values for the statistics record.

b Open the statistics record to view it.

i Select the statistics record and click on the Properties button. The Statistics Record form opens.

ii View the statistics record.

iii Click on the Close button to close the Statistics Record form.

8 Close the object properties form.

Procedure 72-2 To view statistics for a set of objects

Perform this procedure to display the statistics data and collection criteria for a one or more statistics classes.

1 Choose Tools→Statistics Browser from the 5620 SAM main menu. The Browse Statistics form opens.

2 Configure the Statistics Type parameter.

3 Choose a statistics class from the object drop-down list. Choose ALL to select all statistics classes.

4 Specify a filter to create a filtered list of entries, if required.

5 Click on the Search button. A list of entries is displayed.

6 Identify an entry to view.

7 Perform one of the following.

a Scroll horizontally to view the values that the entry contains.

b Open the entry to view it.

i Select the entry and click on the Properties button. The appropriate form opens, based on the Statistics Type parameter setting.

ii View the form contents.

iii Close the form.

8 Close the Browse Statistics form.

Procedure 72-3 To view network accounting statistics

Perform this procedure to display network-based accounting statistics data in a table.

1 Choose Manage→Service Tunnels from the 5620 SAM main menu. The Manage Service Tunnels form opens.

2 Specify a filter to create a filtered list of service tunnels and click on the Search button. A list of service tunnels is displayed.

3 Select a service tunnel in the list and click on the Properties button. The service tunnel properties form opens with the General tab displayed.

4 Click on the Statistics tab button.

5 Choose a statistics class from the object drop-down list.

6 Specify a filter to create a filtered list of statistics classes, if required.

7 Click on the Search button. A list of statistics records is displayed.

8 Identify a statistics record to view.

9 Perform one of the following.

a Scroll horizontally to view the statistics counter values for the statistics record.

b Open the statistics record to view it.

i Select the statistics record and click on the Properties button. The Statistics Record form opens.

ii View the statistics record.

iii Click on the Close button to close the Statistics Record form.

10 Close the service tunnel properties form.

11 Close the Manage Service Tunnels form.

Procedure 72-4 To view performance statistics

Perform this procedure to display performance statistics data in a table.

1 Right-click on an object in the navigation tree and choose Properties from the contextual menu. The properties form for the object opens with the General tab displayed.

2 Click on the Statistics tab button.

3 Choose a statistics class from the object drop-down list.



Note — The Collect and Collect All buttons are not displayed when you choose a statistics class that does not support on-demand statistics collection.

4 Specify a filter to create a filtered list of statistics classes.

5 Perform one of the following.

a Click on the Collect button to collect the statistics for only the specified class.

b Click on the Collect All button to collect statistics for all classes.

The statistics records are displayed in a list.

6 Identify a statistics record to view.

7 Perform one of the following.

a Scroll horizontally to view the statistics counter values for the statistics record.

b Open the statistics record to view it.

i Select the statistics record and click on the Properties button. The Statistics Record form opens.

ii View the statistics record.

iii Click on the Close button to close the Statistics Record form.

8 Close the object properties form.

Procedure 72-5 To view server performance statistics

Perform this procedure to display 5620 SAM server performance statistics data in a table.

1 Choose Tools→Statistics→Server Performance Statistics from the 5620 SAM main menu. The Server Performance Statistics form opens.

2 Choose one of the following statistics classes from the object drop-down list:

- Alarm Rate (SAM Performance Statistics)—counters related to 5620 SAM alarms
- Node Resync (SAM Performance Statistics)—counters related to NE resynchronizations
- SNMP Trap (SAM Performance Statistics)—counters related to NE SNMP traps
- Server Memory (SAM Performance Statistics)—counters related to 5620 SAM server memory usage
- Statistics Collection (SAM Performance Statistics)—counters related to accounting and performance statistics collection

3 Specify a filter to create a filtered list of statistics records, if required.

4 Perform one of the following.

a Click on the Search button to list statistics records for scheduled collections of the statistics class.

b Click on the Collect button to perform an on-demand collection for the statistics class.

5 Identify a statistics record to view.

6 Perform one of the following.

a Scroll horizontally to view the statistics counter values for the statistics record.

b Open the statistics record to view it.

i Select the statistics record and click on the Properties button. The Statistics Record form opens.

ii View the statistics record.

iii Click on the Close button to close the Statistics Record form.

7 Close the Server Performance Statistics form.

Procedure 72-6 To view service accounting statistics

Perform this procedure to display service-based accounting statistics data in a table.

1 Choose Manage→Services from the 5620 SAM main menu. The Manage Services form opens.

2 Specify a filter to create a filtered list of services and click on the Search button. A list of services is displayed.

3 Select a service in the list and click on the Properties button. The service properties form opens with the General tab displayed.

4 Click on the L2 Access Interfaces or L3 Access Interfaces tab button, as required, to display a list of access interfaces.

5 Select an interface in the list and click on the Properties button. The appropriate access interface properties form opens with the General tab displayed.

6 Click on the Statistics tab button.

7 Choose a statistics class from the object drop-down list.

8 Specify a filter to create a filtered list of statistics classes, if required.

9 Click on the Search button. A list of statistics records is displayed.

10 Identify a statistics record to view.

11 Perform one of the following.

- **a** Scroll horizontally to view the statistics counter values for the statistics record.
- **b** Open the statistics record to view it.
  - **i** Select the statistics record and click on the Properties button. The Statistics Record form opens.
  - **ii** View the statistics record.
  - **iii** Click on the Close button to close the Statistics Record form.

12 Close the access interface properties form.

13 Close the service properties form.

14 Close the Manage Services form.

Procedure 72-7 To view subscriber accounting statistics

Perform this procedure to display subscriber-related accounting statistics data in a table.

1 Choose Manage→Residential Subscribers from the 5620 SAM main menu. The Manage Residential Subscribers form opens.

2 Choose Residential Subscriber Instance from the object drop-down list and click on the Search button. A list of residential subscriber instances is displayed.

3 Select a residential subscriber instance in the list and click on the Properties button. The Residential Subscriber Instance properties form opens with the General tab displayed.

4 Click on the Statistics tab button.

5 Choose a statistics class from the object drop-down list.

6 Specify a filter to create a filtered list of statistics classes, if required.

7 Click on the Search button. A list of statistics records is displayed.

8 Identify a statistics record to view.

9 Perform one of the following.

- **a** Scroll horizontally to view the statistics counter values for the statistics record.
- **b** Open the statistics record to view it.
  - **i** Select the statistics record and click on the Properties button. The Statistics Record form opens.
  - **ii** View the statistics record.
  - **iii** Click on the Close button to close the Statistics Record form.

10 Close the Residential Subscriber Instance properties form.

11 Close the Manage Residential Subscribers form.

Procedure 72-8 To view per-subscriber AA accounting statistics

Perform this procedure to display, in a table, the AA-related accounting statistics data for a subscriber.

1 Choose Manage→Residential Subscribers from the 5620 SAM main menu. The Manage Residential Subscribers form opens.

2 Choose Residential Subscriber Instance from the object drop-down list and click on the Search button. A list of residential subscriber instances is displayed.

3 Select a residential subscriber instance in the list and click on the Properties button. The Residential Subscriber Instance properties form opens with the General tab displayed.

4 Click on the Statistics tab button.

5 Choose an AA statistics class from the object drop-down list.

6 Specify a filter to create a filtered list of statistics classes, if required.

7 Click on the Search button. A list of statistics records is displayed.

8 Identify a statistics record to view.

9 Perform one of the following.

- **a** Scroll horizontally to view the statistics counter values for the statistics record.
- **b** Open the statistics record to view it.
  - **i** Select the statistics record and click on the Properties button. The Statistics Record form opens.
  - **ii** View the statistics record.
  - **iii** Click on the Close button to close the Statistics Record form.

10 Close the Residential Subscriber Instance properties form.

11 Close the Manage Residential Subscribers form.

Procedure 72-9 To view AA accounting statistics for an application

Perform this procedure to display, in a table, the AA-related accounting statistics data for an application.

1 Choose Policies→Application Assurance from the 5620 SAM main menu. The Manage Application Assurance Policies form opens.

2 Choose Application Assurance Group Policy from the object drop-down list and click on the Search button. A list of AA group policies is displayed.

3 Select a policy in the list and click on the Properties button. The global Application Assurance Group Policy form opens with the General tab displayed.

4 Click on the Local Definitions tab.

5 Select a local policy definition in the list and click on the Properties button. The Application Assurance Group Policy form opens with the General tab displayed.

6 Click on the Applications tab button.

7 Choose an application in the list and click on the Properties button. The Application properties form opens.

8 Click on the Statistics tab button.

9 Specify a filter to create a filtered list of statistics classes, if required.

10 Click on the Search button. A list of statistics records is displayed.

11 Identify a statistics record to view.

12 Perform one of the following.

- a Scroll horizontally to view the statistics counter values for the statistics record.
- b Open the statistics record to view it.
  - i Select the statistics record and click on the Properties button. The Statistics Record form opens.
  - ii View the statistics record.
  - iii Click on the Close button to close the Statistics Record form.

13 Close the Application properties form.

14 Close the local Application Assurance Group Policy form.

15 Close the global Application Assurance Group Policy form.

16 Close the Manage Application Assurance Policies form.

Procedure 72-10 To view AA accounting statistics for an application group

Perform this procedure to display, in a table, the AA-related accounting statistics data for an application group.

1 Choose Policies→Application Assurance from the 5620 SAM main menu. The Manage Application Assurance Policies form opens.

2 Choose Application Assurance Group Policy from the object drop-down list and click on the Search button. A list of AA group policies is displayed.

3 Select a policy in the list and click on the Properties button. The global Application Assurance Group Policy form opens with the General tab displayed.

4 Click on the Local Definitions tab.

5 Select a local policy definition in the list and click on the Properties button. The local Application Assurance Group Policy form opens with the General tab displayed.

6 Click on the Application Groups tab button.

7 Choose an application group in the list and click on the Properties button. The Application Group properties form opens.

8 Click on the Statistics tab button.

9 Specify a filter to create a filtered list of statistics classes, if required.

10 Click on the Search button. A list of statistics records is displayed.

11 Identify a statistics record to view.

12 Perform one of the following.

- a Scroll horizontally to view the statistics counter values for the statistics record.
- b Open the statistics record to view it.
  - i Select the statistics record and click on the Properties button. The Statistics Record form opens.
  - ii View the statistics record.
  - iii Click on the Close button to close the Statistics Record form.

13 Close the Application Group properties form.

14 Close the local Application Assurance Group Policy form.

15 Close the global Application Assurance Group Policy form.

16 Close the Manage Application Assurance Policies form.

Procedure 72-11 To view AA accounting statistics for a protocol

Perform this procedure to display, in a table, the AA-related accounting statistics data for a protocol.

1 Choose Policies→Application Assurance from the 5620 SAM main menu. The Manage Application Assurance Policies form opens.

2 Choose Local from the Policy scope drop-down menu.

3 Specify a device by clicking on the Select button and choosing a device from the list.

4 Choose Application Assurance Protocol from the object drop-down list and click on the Search button. A list of protocols is displayed.

5 Select a protocol in the list and click on the Properties button. The Application Assurance Protocol (Edit) form opens with General tab displayed.

6 Click on the Statistics tab button.

7 Specify a filter to create a filtered list of statistics records, if required.

8 Click on the Search button. A list of statistics records is displayed.

9 Identify a statistics record to view.

10 Perform one of the following.

a Scroll horizontally to view the statistics counter values for the statistics record.

b Open the statistics record to view it.

i Select the statistics record and click on the Properties button. The Statistics Record form opens.

ii View the statistics record.

iii Click on the Close button to close the Statistics Record form.

11 Close the Application Assurance Protocol (Edit) form.

12 Close the Manage Application Assurance Policies form.

73 — Graphing statistics

73.1 Graphing statistics overview *73-2*

73.2 Workflow for graphing statistics *73-5*

73.3 Graphing statistics menus *73-5*

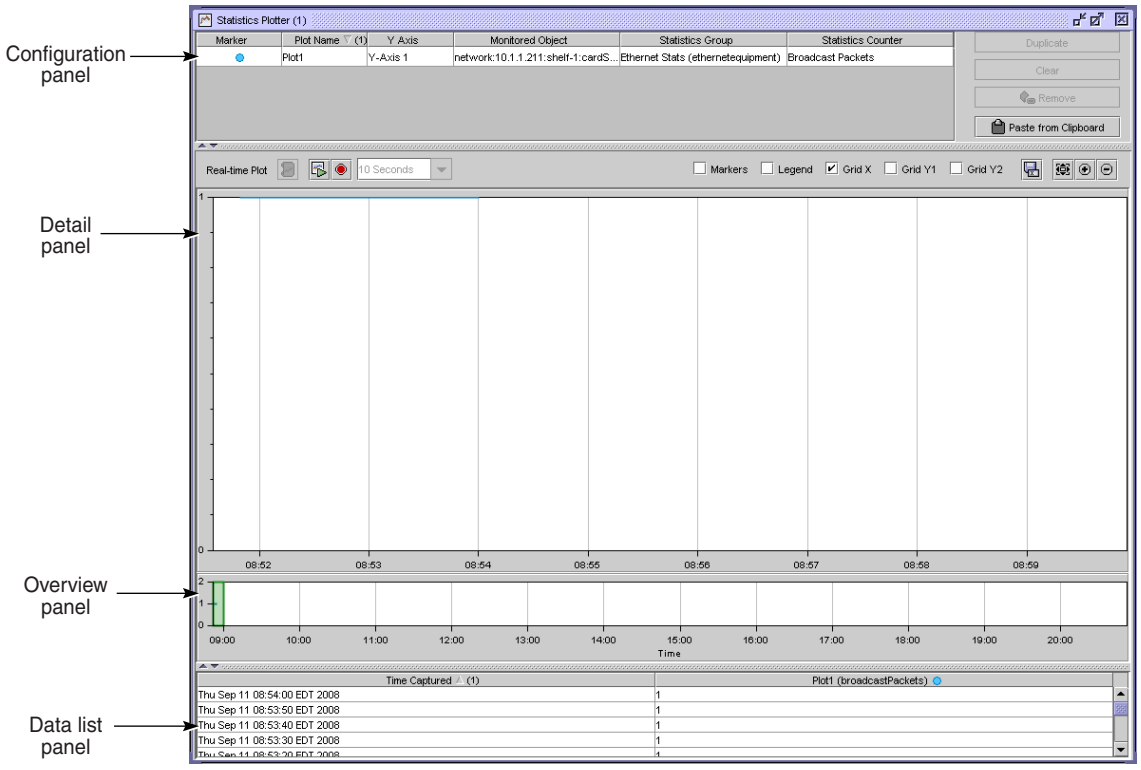
73.4 Graphing statistics procedures list *73-5*

73.5 Graphing statistics procedures *73-5*

73.1 Graphing statistics overview

The 5620 SAM client GUI can display real-time and historical statistics line graphs of many statistics types. You can plot multiple counters in a graph, and can have multiple graphs open at one time. Figure 73-1 shows the 5620 SAM Statistics Plotter form.

Figure 73-1 5620 SAM Statistics Plotter



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Statistics Plotter

The 5620 SAM Statistics Plotter allows you to plot counter values for real-time or historical statistics. The Statistics Plotter contains the following panels:

- configuration panel—allows you to enter the counters to plot
- detail panel—contains the plotted graph points and axes
- overview panel—provides an overview of the entire data range of the statistics available for plotting
- data panel—presents the graph data in tabular form

You can maximize or minimize a panel by clicking on the up or down arrow on the left side of the divider bar between it and the neighboring panel.

Configuration panel

The configuration panel identifies the objects and statistics counters in a graph. You can enter up to four counters in this panel. If more than one counter from the same monitored object is required, you can click on the Duplicate button and choose the new counter and class. After you choose the counters, you can close the panel to increase the space available for the graph panels. The Configuration panel contains the following columns:

- Marker—displays the data points as markers in the detail panel
- Plot Name—identifies the plots in the graph
- Y Axis—allows you to choose Y Axis 1 or Y Axis 2. See "Choosing the Y-axis" in this section for more information
- Monitored Object—lists the monitored objects
- Statistics Group—allows you to choose the statistics class for the object
- Statistics Counter—allows you to choose the statistics counter for the object. See "Statistics counters" in this section for more information

Detail panel

The detail panel contains the plotted statistics line graphs. The panel can contain historical or real-time graphs, but not both.

The real-time graphs start collection after the plotter opens. The historical graphs use the data stored in the 5620 SAM database. You can zoom in and zoom out on a graph, and for real-time statistics, you can enable or disable automatic scrolling. See "Overview panel" in this section for more information.

You can enable or disable the markers and legend for a graph, and can save a graph with or without the legend or markers. Markers are useful for identifying different lines, for example, when a graph is printed in black and white. You can enable or disable the X, Y1, and Y2 grid lines. The Y1 and Y2 grid lines are displayed only when the corresponding Y axis is in use. See Procedures 73-2 and 73-3 for more information.

Overview panel

The overview panel displays a high-level view of the plot data. The shaded box in the panel contains the statistics that are displayed in the detail panel. When you double-click on the box, you toggle automatic scrolling on or off. The box is green when automatic scrolling is enabled, and red when it is disabled. You can click on the box and drag it horizontally to change the display in the detail panel. When the box is not selected and real-time statistics are being plotted, the box autoscrolls to show the latest statistics. When automatic scrolling is disabled, the detail panel remains in the location shown in the red box.

Data panel

The data panel displays a table of the collected statistics values. The statistics can be saved in CSV or HTML format. See chapter 3 of the *5620 SAM User Guide* for information about using the contextual menu in the plot value list heading.

Choosing the Y-axis

The statistics graph can have one X axis and two Y axes. The X axis is a time scale and the Y axis is the scale for data values. You can choose a Y axis from the drop-down menu in the configuration panel.

One plotter can simultaneously plot up to four counters. Plotters can have independent Y axes on the left and right of the graph. Any counters can be assigned to a Y axis.

Statistics counters

Up to four statistics counters can be plotted in a graph.

A statistics counter name that includes the word “periodic” is a counter that records the difference between the current and previous counter values. For example, when the 5620 SAM polls the Transmitted Octets counter, it subtracts the counter value from the previously polled value and stores the result in the Transmitted Octets Periodic counter. A non-periodic statistics counter contains a cumulative value.

Real-time statistics data collection

The Statistics Plotter has a configurable default polling interval and a retention period for real-time statistics collection. The retention period is configurable from the User Preferences form. The retention period specifies how long the 5620 SAM collects real-time statistics before it deletes the oldest sample. At a sampling rate of 10 s, the plotter stores 8640 samples per counter in one day. See Procedure 73-1 for more information about configuring the global statistics graph parameters. You can also specify a polling interval that differs from the default interval. See Procedure 73-2 for more information.

The detail and data panels indicate when a real-time statistic is missing from a plot. The detail panel plot markers in the plot list panel Markers column change from solid to dark grey with the marker color as the border. The data panel displays N/A or Data Missing instead of a data value.

- N/A indicates that events are skewed. For example, there is data event plot for plot 1 and plot 2 at time T1, and a data event plot for plot 3 and plot 4 at time T2. Accordingly, the table row displays N/A for plot 3 and plot 4 at time T1, and for plot 1 and plot 2 at time T2. N/A is displayed whenever the same graph plots counters from different classes or different NEs.
- Data Missing indicates an error during statistics collection. Data Missing is displayed when an NE reports an error or when the polling interval elapses before the response to a previous poll arrives.

You can remove a plot at any time during real-time statistics collection. The plot disappears immediately from the detail panel and data panel. See Procedures 73-2 and 73-3 for more information.

73.2 Workflow for graphing statistics

1. Configure the graph parameters. See Procedure 73-1 for more information.
2. Configure statistics collection for the equipment or logical object to be used as the source of the statistics data to be graphed.
3. Create a real-time or historical statistics graph. See Procedure 73-2 for more information.
4. Modify a real-time or historical statistics graph. See Procedure 73-3 for more information.

73.3 Graphing statistics menus

Table 73-1 lists the statistics graph menus and functions.

Table 73-1 5620 SAM statistics graph menu

Menu option	Function
Application→User Preferences	Configure statistics graph user preferences.
Tools→Statistics Plotter→New Plot	Create and configure a statistics graph.
Tools→Statistics Plotter→Statistics Plotter (#)	Modify a statistics graph.

73.4 Graphing statistics procedures list

Table 73-2 lists the procedures necessary to perform statistics graphing tasks.

Table 73-2 5620 SAM statistics graphing procedures list

Procedure	Purpose
To configure the statistics graph parameters	Specify the default graph polling interval and the retention time.
To configure and plot a statistics graph	Configure and plot a statistics graph.
To modify a statistics graph	Open and modify a statistics graph.

73.5 Graphing statistics procedures

Use the following procedures to perform statistics graphing tasks.

Procedure 73-1 To configure the statistics graph parameters

Perform this procedure to specify the global 5620 SAM parameters for graphing statistics.

1 Choose Application→User Preferences from the 5620 SAM main menu. The User Preferences form opens with the General tab displayed.

2 Click on the Statistics Plotter tab button.

3 Configure the parameters:

- Default Polling Interval (Seconds)
- Maximum Data Retention Time (Seconds)

4 Click on the OK button to close the User Preferences form and apply the changes. The User Preferences form closes.

Procedure 73-2 To configure and plot a statistics graph

Perform this procedure to graphically plot statistics on the 5620 SAM GUI.

1 Perform one of the following.

a Use the Copy to Clipboard function to plot a statistics graph.

i Right-click on a monitored object in the navigation tree and choose Copy to Clipboard from the contextual menu, or select a monitored object from a form and click on the Copy to Clipboard button.

ii Choose Tools→Statistics Plotter→New Plot from the 5620 SAM main menu. The Statistics Plotter form opens.

iii Click on the Paste from Clipboard button or right-click in the configuration panel and choose Paste from Clipboard from the contextual menu. The object appears in the configuration panel.

b Use the Plotter button to plot a statistics graph.

i Right-click on an object in the navigation tree and choose Properties from the contextual menu. The properties form for the object opens with the General tab displayed.

ii Click on the Statistics tab button.

iii Choose a statistics class from the object drop-down list, if required.

iv Click on the Search button to view statistics record entries for scheduled collections of the selected statistics class, or click on the Collect button to perform an on-demand collection and view the current statistics for the selected statistics class.

v Choose a statistics record.

vi Click on the Plotter button and choose New Plot from the drop-down menu. The Statistics Plotter form opens.

2 Click on a plot in the Statistics Group column of the configuration panel and choose a statistics group from the drop-down list.

Additional configurable columns may appear in the configuration panel if the selected statistics group has filterable attributes. The columns allow you to filter the statistics. Perform the following actions to configure a filter, as required.

- Click on an up or down arrow in a column heading to specify an enumerated entry such as a queue ID.
- Double-click in a text-based column heading and type in a value.



Note — The 5620 SAM does not validate a typed entry. You must type an entire entry correctly to generate the expected filter output.

3 Click on a plot in the Statistics Counter column of the configuration panel and choose a statistics counter from the drop-down list.

4 Add a plot to the statistics plotter. You can duplicate the existing object or choose a new object. If the same object is used, the statistics counter must be unique. If a different object is used, the same statistics counter can be used for each object.



Note — A statistics graph can plot up to four statistics counters. The statistics counters can all be the same when there are four different objects. If only one object is used, each statistics counter must be unique.

a To add a plot using an object in the list:

i Choose an object from the list and click on the Duplicate button. The plot is duplicated in the list.

ii Click on the new plot in the Statistics Group column and choose a statistics group from the drop-down list.

iii Click on the new plot in the Statistics Counter column and choose a statistics counter from the drop-down list. The counter must be unique.

iv Click on the Y Axis column and choose an axis from the drop-down list.

b To add a statistics counter using a new object, repeat to steps 1 b to 4.

5 To add another plot to the plotter, repeat step 4. You can create up to four plots.

6 Perform one of the following.



Note 1 — Real-time statistics plotting is supported for network performance, server performance, and MIB-based accounting statistics. historical statistics plotting is supported for network performance, server performance, and accounting statistics.

Note 2 — Each plot must be unique. The 5620 SAM deletes the older plot if you attempt to create a duplicate a plot in this step.

a To create a real-time statistics graph:

i Choose a polling interval from the Real-time Polling Interval drop-down menu, or enter a value between 10 and 3600.

ii Click on the Real-time Plot button. The detail panel displays the plotted statistics using the configured polling interval.



Note — You do not have to stop real-time statistics collection to add or remove plots.

iii Click on the stop button to pause the real-time statistics collection.

b To create a graph using historical statistics, click on the Historical Plot button. The statistics that are stored in the database are plotted in the detail panel.

7 Perform one or more of the following to view details in the detail panel.

a To display a tooltip for a plot, move the mouse pointer over the data points in the detail panel. A tooltip identifies the plot number, the statistics collection interval, and the statistics value at that interval.

b To change the view displayed in the detail panel, click on the green box in the overview panel and drag the box horizontally.

When the green box is not selected and real-time statistics are being collected, the green box autoscrolls to display the latest statistics.

c To turn off autoscrolling, double-click on the green box. The green box changes to red. When the box is red, autoscrolling is turned off and the detail panel remains in the location shown in the overview panel red box.

d To resize the objects in the detail panel, click on the Zoom in Tool and Zoom out Tool buttons; click on the Reset Zoom tool button to return to the default graph view.

e To display the data points for each plot in the detail panel, select the Markers check box.

f To display a legend in the detail panel, select the Legend check box.

g To display the X-axis grid lines, select the Grid X check box. This check box is selected by default.

h To display the Y1 grid lines, select the Grid Y1 check box. The Y1 axis is displayed on the left side of the detail panel. The grid lines are displayed only if the Y1 axis is in use.

i To display the Y2 grid lines, select the Grid Y2 check box. The Y2 axis is displayed on the right side of the detail panel. The grid lines are displayed only if the Y2 axis is in use.

j Perform the following steps to hide or show a plot in the detail panel. This is required when plots in the detail panel overlap.

i Choose the plot to hide in the detail panel.

ii Click in the column heading configuration panel and choose Plot *n* in the drop-down list, where *n* is the plot to hide. The check mark is removed from the plot list, and the plot is removed from the detail and data panels.



Note — Statistics collection does not stop when a plot is hidden.

iii To show the plot in the detail panel, right-click in the column heading of the data panel and choose Plot *n* from the contextual menu, where *n* is the plot to show. A check mark is displayed beside the plot in the contextual menu and the plot is displayed in the detail and data panels.

8 To clear a plot from the detail panel but keep the plot in the configuration panel so that the plot can be used to create a new plot:

i Choose the object in the list and click on the Clear button. The plot is deleted from the detail and data panels.

ii Click on the plot in the Statistics Counter column and choose a unique statistics counter from the drop-down list.

iii Click on the Y Axis column and choose an axis from the drop-down list.

9 To remove a plot from the detail and data panels, select the object in the list and click on the Remove button. The plot is deleted from the detail and data panels.

10 Perform one of the following steps, if required.

a To switch from a real-time statistics graph to a historical statistics graph, click on the Stop button and click on the Historical Plot button. The detail panel clears and the statistics stored in the database are plotted in the detail panel.

b To switch from a historical statistics graph to a real-time statistics graph, choose a polling interval from the real-time polling interval drop-down menu or enter a value between 10 and 3600 seconds and click on the Real-time Plot button. The detail panel clears and real-time statistics plotting begins.

11 Save the statistics graph results, if required.



Note 1 — Only the detail that appears in the detail panel is saved. To change the view in the detail panel before you save the results, use the overview panel or the zoom buttons.

Note 2 — If the Legend check box is selected, the legend is saved with the statistics graph results.

i Click on the Save Current View button. The Save as form appears.

ii Specify a directory in which to save the statistics graph using the Save In parameter. The Save In form opens.

iii Enter a filename in the File Name field.

iv Choose JPG or PNG from the Type of File drop-down menu.

v Click on the Save button. The Save as form closes and the graph is saved in the specified JPG or PNG file.

12 Save the statistics table results, if required. All of the statistics in the data panel are saved.

i Right-click on the plot value list heading and choose Save To File from the contextual menu. The Save form opens.

ii Specify a directory in which to save the statistics table using the Save In parameter. The Save In form opens.

iii Enter a filename using the File Name field.

iv Choose HTML or CSV from the Type of File drop-down menu.

v Click on the Save button. The Save form closes and the contents of the plot value list are saved in the specified file.

13 Close the Statistics Plotter form.



Note — The Statistics Plotter form cannot be saved. When you close a Statistics Plotter form, the data in the form is deleted.

Procedure 73-3 To modify a statistics graph

Perform this procedure to modify an existing statistics graph that contains one or more plots.

1 Perform one of the following.

a To open a Statistics Plotter form, choose Tools→Statistics Plotter→Statistics Plotter (#) from the 5620 SAM main menu. The Statistics Plotter form opens.

b To add an object to the Statistics Plotter form:

i Choose the object on which to modify a statistics graph.

ii Open a view of the object in the navigation tree.

iii Right-click on the object in the navigation tree view selector and choose Properties from the contextual menu. The properties form for the object opens with the General tab displayed.

iv Click on the Statistics tab button.

v Choose statistics class from the object drop-down list.

vi Click on the Plotter button and choose Statistics Plotter (#) from the drop-down menu. The Statistics Plotter form opens with the current plot information displayed.



Note — A statistics graph can plot up to four statistics counters. The statistics counters can be same the if there are four different objects. If only one object is used, each statistics counter must be unique.

If the Statistics Plotter already contains four plots, a dialog box notifies you that the graph contains the maximum allowed number of plots, which means that the Statistics Plotter cannot be modified. Click on the OK button.

If the Statistics Plotter (#) menu item is not available, the Statistics Plotter does not support the selected object type.

2 Perform steps 2 to 13 of Procedure 73-2.

74 — Using the 5620 SAM-O to collect statistics

74.1 Using the 5620 SAM-O to collect statistics *74-2*

74.1 Using the 5620 SAM-O to collect statistics

This chapter is an overview of statistics collection using the 5620 SAM-O interface. See the *5620 SAM-O OSS Interface Developer Guide* for more information.

Third-party statistics collection process

A third-party OSS client application can use the following methods to collect 5620 SAM accounting and performance statistics from the 5620 SAM-O interface:

- findToFile—for infrequent, low-volume transfers of statistics data from the 5620 SAM database. The findToFile method can save statistics for multiple NEs in one file. The 5620 SAM generates a FileAvailableEvent each time that a file is created using this method.
- registerLogToFile—for creating accounting statistics export files that are based on specific class types. The 5620 SAM exports the accounting statistics data to a file after it retrieves the data from an NE, and saves the file in a specified directory on the main server. The 5620 SAM generates a LogFileAvailableEvent each time that a file is created using this method, which is asynchronous.



Note — Alcatel-Lucent recommends that you use the registerLogToFile method to maintain an up-to-date view of accounting statistics. Use the findToFile method for infrequent queries on performance or accounting statistics. Do not use the findToFile method in large networks with high statistics collection rates. See the *5620 SAM-O OSS Interface Developer Guide* for more information.

See the *5620 SAM-O OSS Interface Developer Guide* for more information about using the 5620 SAM-O to transfer statistics records from the 5620 SAM database to your OSS client application.

XML methods for transferring statistics files to OSS client applications

Table 74-1 describes the XML methods and the associated parameters that a 5620 SAM-O client can use to retrieve statistics from a 5620 SAM main server.

Table 74-1 XML methods for collecting statistics

Method	Description	Input parameters and descriptions	
find	Returns the set of objects of the specified type that match the filter criteria.	fullClassName	Package qualified class name in dot-separated format
		filter (optional)	Filter for properties of the class that correspond to fullClassName
		resultFilter (optional)	Filter that limits the information returned per object

(1 of 2)

Method	Description	Input parameters and descriptions	
findToFile	Finds the set of objects of the specified type that match the given filter criteria, and places the results in the specified file on the server. The 5620 SAM generates a FileAvailableEvent when the method execution is complete.	fullClassName	Package qualified class name in dot-separated format
		fileName	File in which to store the results of this find operation, specified using a relative file path
		filter (optional)	Filter for properties of the class that correspond to fullClassName
		resultFilter (optional)	Filter that limits the information returned per object
registerLogToFile	Creates export files of accounting statistics on the 5620 SAM server for statistics collected after registration. The 5620 SAM generates a LogFileAvailableEvent when a file is ready for retrieval.	fullClassName	A comma-separated list of accounting statistics classes
		dirName	The relative path to the directory in which to save the files. The path is relative to the accountingStats directory under the OSS XML export directory. Alcatel-Lucent recommends using separate directories for different applications that export statistics.
		compress (optional)	Specifies whether export files are created in a compressed format
		jmsClientId	The JMS client ID that is to be notified when a new export file is created. A notification message is sent to each client that registers for statistics each time the method creates an export file that is associated with the client.
		resultFilter (optional)	Specifies the attributes that are to be included in the exported data records. You can use the resultFilter parameter to reduce the export file size.

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Third-party applications for processing statistics

You can use an in-house statistics-processing application or a third-party vendor application, such as Quallaby or Infovista, to manage the statistics information that the 5620 SAM collects.

Statistics content

75 — Statistics record format

75 — Statistics record format

75.1 Statistics types *75-2*

75.2 Performance statistics *75-3*

75.3 Accounting statistics *75-4*

75.4 Server performance statistics *75-13*

75.1 Statistics types

Table 75-1 lists and describes the statistics types that the 5620 SAM supports.

Table 75-1 5620 SAM statistics types

Statistics type	Description
Performance	Performance statistics provide categorized information about network throughput. Performance statistics are available from most physical equipment and logical element GUI configuration forms.
Accounting	There are three main classes of accounting policy: service, network, and subscriber. An accounting statistics record contains the following common fields in addition to the counters that are associated with each policy type: • Time Captured • Record Type • Monitored Object • Monitored Object Name • Site Name • Site ID • Periodic Time • Time Recorded A service accounting statistics record contains the following additional fields: • Sap Id • Svc Id • Sdp Id • Queue Id A network accounting statistics record contains the following additional fields: • Forwarding Class • Lag Port • Port Id • Queue Id A subscriber accounting statistic record contains the following additional fields: • Subscriber Id • Subscriber Profile Id • Sla Profile Id The 5620 SAM creates separate ingress and egress statistics records for the accounting statistics that are associated with an NE.
Server performance	Server performance statistics include 5620 SAM main and auxiliary server performance counters that monitor memory usage, JMS activity, alarm activity, SNMP trap receipt, NE resynchronizations, and statistics collection.

75.2 Performance statistics

Performance statistics provide categorized information about network throughput. Performance statistics records are viewable from most physical-equipment and logical-element GUI properties forms. The information in a performance statistics record includes the following:

- collection timestamp
- collection record type
- source device and object identifiers
- Suspect indicator that indicates a problem with the collected statistics; for example, when an NE is unresponsive to SNMP requests
- statistics counters that contain the raw data

Table 75-2 lists and describes the properties in a performance statistics record.

Table 75-2 Performance statistics record properties

Property	Description
Monitored Object	Unique identifier of the object from which the statistics are collected
Monitored Object Name	Name of the object from which the statistics are collected
Periodic Time	Time between collections
Record Type	The type of record, based on the following collection types: • Scheduled Full Performed according to a user-configurable schedule • On-demand Performed immediately at the request of a 5620 SAM operator • Real-time Performed as part of real-time graph creation using the 5620 SAM Statistics Plotter
Site ID	NE identifier
Site Name	NE name
Suspect	Indicates a statistics collection failure.
Time Captured	Time at which the statistics are collected



Note — When the Suspect indicator in a record is set, the counters in the record contain the following values:

- periodic counters—zero
- non-periodic counters—the value of the same counter in the most recent non-suspect record

75.3 Accounting statistics

Accounting statistics are available for network ports, SAPs, SDPs, and subscribers. Service accounting statistics provide service-usage data for billing requirements. Network accounting statistics provide service-quality data for SLA QoS compliance requirements. Subscriber accounting statistics provide subscriber profile usage information for billing and SLA compliance. The information in an accounting statistics record includes the following:

- collection timestamp
- collection record type
- source device and object identifiers
- statistics counters that contain the raw data

Table 75-3 describes the accounting policy types that the 5620 SAM supports.

Table 75-3 Accounting policy types

Accounting policy type	Policy name and description	NE acronym
Application assurance	AA Application—octet, packet, and flow counters for applications	aaApp
	AA Application Group—octet, packet, and flow counters for application groups	aaAppGrp
	AA Protocol—octet, packet, and flow counters for protocols	aaProt
	AA Subscriber Application—octet, packet, and flow counters for applications per subscriber	aaSubAppGrp
	AA Subscriber Protocol—octet, packet, and flow counters for protocols per subscriber	aaSubProt
	Custom Record AA Subscriber—octet, packet, and flow counters per subscriber	aaSubCustom
Network	Combined MPLS LSP Egress—counters for egress data path at ingress LER	cmmplslspe
	Combined MPLS LSP Ingress—counters for ingress data path at egress LER	cmmplslspi
	Combined Network Ing Egr Octets—octet counters for ingress and egress network port queues	cmNio, cmNeo
	Combined Queue Groups—packet and octet counters for ingress and egress service queue groups and egress network queue groups	cmQgse, cmQgsi, cmQgne
	Network Egress Octet—octet counters for egress network port queues	neo
	Network Ingress Octet—octet counters for ingress network port queues	nio
	Network Egress Packet—packet counters for egress network port queues	nep
	Network Ingress Packet—packet counters for ingress network port queues	nip
	Queue Group Octets—octet counters for ingress and egress service queue groups and egress network queue groups	qgose, qgosi, qgone
	Queue Group Packets—packet counters for ingress and egress service queue groups and egress network queue groups	qgpse, qgpsi, qgpne

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Accounting policy type	Policy name and description	NE acronym
Service	Combined Service Ing Egr Octets—octet counters for ingress and egress SAP queues	cmSio, cmSeo
	Combined Service Ingress—packet and octet counters for ingress SAP queues	cmSipo
	Combined Service SDP Ingress Egress—per-service packet and octet counters on ingress and egress SDPs	cpSdpipo, cpSdpepo
	Compact Service Ingress Octets—octet counters for ingress SAP queues	ctSio
	Complete Service Ingress Egress—packet and octet counters for ingress SAP queues	cpSipo, cpSepo
	Complete Service SDP Ingress Egress—packet and octet counters on ingress and egress SDPs	cmSdpipo, cmSdpepo
	Custom Record Service—user-specified Complete Service Ingress Egress counters	cpSipo, cpSepo
	Service Egress Octet—octet counters for egress SAP queues	seo
	Service Ingress Octet—octet counters for ingress SAP queues	sio
	Service Egress Packet—packet counters for egress SAP queues	sep
	Service Ingress Packet—packet counters for ingress SAP queues	sip
Subscriber	Complete Subscriber Ingress Egress—per-subscriber packet and octet counters for ingress and egress SAP queues	cpSBipo, cpSBepo
	Custom Record Subscriber—user-specified Complete Subscriber Ingress Egress counters	cpSBipo, cpSBepo, cpSBipooc, cpSBepooc

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Table 75-4 lists and describes the properties in an accounting statistics record.

Table 75-4 Accounting statistics record properties

Property	Description
Forwarding Class	Forwarding class associated with a queue
Lag Port	Identifies a LAG port
Monitored Object	Detailed information about the object for which the statistics are collected
Monitored Object Name	Name of the object for which the statistics are collected
Periodic Time	Not applicable to accounting statistics
Port Id	Identifies a port
Queue Id	Identifies a hardware queue
Record Type	Type of collection, for example, Scheduled Full
Sap Id	Physical port identifier portion of a SAP definition
Sdp Id	Identifies an SDP
Site ID	Identifies a site
Site Name	Identifies the name of a site
SlaProfile Id	Identifies the value assigned to an SLA profile
Subscriber Id	Identifies a subscriber

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Property	Description
Subscriber Profile Id	Identifies a subscriber profile
Svc Id	Identifies a service
Time Captured	Time when the 5620 SAM starts to process the data file collected from the NE
Time Recorded	Time when the statistics were collected on the NE

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Table 75-5 lists the statistics counters in each accounting policy.

Table 75-5 Accounting statistics counters by policy

Accounting policy	5620 SAM statistics object	5620 SAM counter	NE counter
AA Protocol AA Application AA Application Group AA Subscriber Protocol AA Subscriber Application	AA Protocol Stats AA App Stats AA App Grp Stats AA Sub Prot Stats AA Sub App Stats	Net to Sub Active Flows	naf
		Net to Sub Admit Flows	nfa
		Net to Sub Admit Octets	nba
		Net to Sub Admit Pkts	npa
		Net to Sub Deny Flows	nfd
		Net to Sub Deny Octets	nbd
		Net to Sub Deny Pkts	npd
		Num of Subs	nsub
		Sub to Net Active Flows	saf
		Sub to Net Admit Flows	sfa
		Sub to Net Admit Octets	sba
		Sub to Net Admit Pkts	spa
		Sub to Net Deny Flows	sfd
		Sub to Net Deny Octets	sbd
		Sub to Net Deny Pkts	spd
		Total Flow Duration	tfd
		Total Term Flows	tfc

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Accounting policy	5620 SAM statistics object	5620 SAM counter	NE counter
Combined MPLS LSP Egress Ingress	CombinedMplsLspEgress	Forwarding Class	fc
		In Profile Octets Forwarded	iof
		Out of Profile Octets Forwarded	oof
		In Profile Packets Forwarded	ipf
		Out of Profile Packets Forwarded	opf
	CombinedMplsLspIngress	Forwarding Class	fc
		In Profile Octets Forwarded	iof
		Out of Profile Octets Forwarded	oof
		In Profile Packets Forwarded	ipf
		Out of Profile Packets Forwarded	opf
Combined Network Ing Egr Octets	CombinedNetworkEgressOctets	In Profile Octets Dropped	iod
		In Profile Octets Forwarded	iof
		Out Of Profile Octets Dropped	ood
		Out Of Profile Octets Forwarded	oof
	CombinedNetworkIngressOctets	In Profile Octets Dropped	iod
		In Profile Octets Forwarded	iof
		Out Of Profile Octets Dropped	ood
		Out Of Profile Octets Forwarded	oof
Combined Service Ing Egr Octets	CombinedServiceEgressOctets	In Profile Octets Dropped	iod
		In Profile Octets Forwarded	iof
		Out Of Profile Octets Dropped	ood
		Out Of Profile Octets Forwarded	oof
	CombinedServiceIngressOctets	High Octets Dropped	hod
		High Octets Offered	hoo
		In Profile Octets Forwarded	iof
		Low Octets Dropped	lod
		Low Octets Offered	loo
		Out Of Profile Octets Forwarded	oof
		Uncoloured Octets Offered	uco
		Uncoloured Packets Offered	ucp

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Accounting policy	5620 SAM statistics object	5620 SAM counter	NE counter
Combined Service Ingress	CombinedServiceIngressPacketOctets	High Octets Dropped	hod
		High Octets Offered	hoo
		High Pkts Dropped	hpd
		High Pkts Offered	hpo
		In Profile Octets Forwarded	iof
		In Profile Pkts Forwarded	ipf
		Low Octets Dropped	lod
		Low Octets Offered	loo
		Low Pkts Dropped	lpd
		Low Pkts Offered	lpo
		Out Of Profile Octets Forwarded	oof
		Out Of Profile Pkts Forwarded	opf
		Uncoloured Octets Offered	uco
		Uncoloured Packets Offered	ucp
Combined Service SDP Ingress Egress	CombinedSdpIngressPacketOctets	Total Octets Dropped	tod
		Total Octets Forwarded	tof
		Total Packets Dropped	tpd
		Total Packets Forwarded	tpf
	CombinedSdpEgressPacketOctets	Total Octets Forwarded	tof
		Total Packets Forwarded	tpf
Compact Service Ingress Octets	CompactServiceIngressOctets	High Octets Dropped	hod
		High Octets Offered	hoo
		Low Octets Dropped	lod
		Low Octets Offered	loo
		Uncoloured Octets Offered	uco
		Uncoloured Packets Offered	ucp

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Accounting policy	5620 SAM statistics object	5620 SAM counter	NE counter
Complete Service Ingress Egress	CompleteServiceEgressPacketOctets	In Profile Octets Dropped	iod
		In Profile Octets Forwarded	iof
		In Profile Pkts Dropped	ipd
		In Profile Pkts Forwarded	ipf
		Out Of Profile Octets Dropped	ood
		Out Of Profile Octets Forwarded	oof
		Out Of Profile Pkts Dropped	opd
		Out Of Profile Pkts Forwarded	opf
	CompleteServiceIngressPacketOctets	High Octets Dropped	hod
		High Octets Offered	hoo
		High Pkts Dropped	hpd
		High Pkts Offered	hpo
		In Profile Octets Forwarded	iof
		In Profile Pkts Forwarded	ipf
		Low Octets Dropped	lod
		Low Octets Offered	loo
		Low Pkts Dropped	lpd
		Low Pkts Offered	lpo
		Out Of Profile Octets Forwarded	oof
		Out Of Profile Pkts Forwarded	opf
		Uncoloured Octets Offered	uco
		Uncoloured Packets Offered	ucp
Complete Service SDP Ingress Egress	CombinedSdpIngressPacketOctets	Total Octets Dropped	tod
		Total Octets Forwarded	tof
		Total Packets Dropped	tpd
		Total Packets Forwarded	tpf
	CombinedSdpEgressPacketOctets	Total Octets Forwarded	tof
		Total Packets Forwarded	tpf
	CompleteSdpIngressPacketOctets	Total Octets Dropped	tod
		Total Octets Forwarded	tof
		Total Packets Dropped	tpd
		Total Packets Forwarded	tpf
	CompleteSdpEgressPacketOctets	Total Octets Forwarded	tof
		Total Packets Forwarded	tpf

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Accounting policy	5620 SAM statistics object	5620 SAM counter	NE counter
Complete Subscriber Ingress Egress	CompleteSubscriberIngressPacketOctets	High Priority Pkts Dropped	hpd
		High Priority Pkts Offered	hpo
		Low Priority Pkts Dropped	lpd
		Low Priority Pkts Offered	lpo
		High Priority Octets Dropped	hod
		High Priority Octets Offered	hoo
		Low Priority Octets Dropped	lod
		Low Priority Octets Offered	loo
		In Profile Octets Forwarded	iof
		Out Of Profile Octets Forwarded	oof
		In Profile Pkts Forwarded	ipf
		Out Of Profile Pkts Forwarded	opf
		Uncoloured Octets Offered	uco
		Uncoloured Pkts Forwarded	ucp
	CompleteSubscriberEgressPacketOctets	In Profile Octets Dropped	iod
		In Profile Octets Forwarded	iof
		In Profile Pkts Dropped	ipd
		In Profile Pkts Forwarded	ipf
		Out Of Profile Octets Dropped	ood
		Out Of Profile Octets Forwarded	oof
		Out Of Profile Pkts Dropped	opd
		Out Of Profile Pkts Forwarded	opf
Custom Record AA Subscriber	AASubCustomStats AASapCustomStats	Short Duration Flows	—
		Medium Duration Flows	—
		Long Duration Flows	—
		Total Flow Duration	—
		Total Flows Completed	—
Custom Record Service	CustomRecordService	User-selectable Complete Service Ingress Egress counters	Various
		All Octets Offered	—
		All Packets Offered	—
Custom Record Subscriber	CustomRecordSubscriber	User-selectable Complete Service Ingress Egress counters	Various
		All Octets Offered	—
		All Packets Offered	—

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Accounting policy	5620 SAM statistics object	5620 SAM counter	NE counter
Network Egress Octet	NetworkEgressOctets	In Profile Octets Dropped	iod
		In Profile Octets Forwarded	iof
		Out Of Profile Octets Dropped	ood
		Out Of Profile Octets Forwarded	oof
Network Ingress Octet	NetworkIngressOctets	In Profile Octets Dropped	iod
		In Profile Octets Forwarded	iof
		Out Of Profile Octets Dropped	ood
		Out Of Profile Octets Forwarded	oof
Network Egress Packet	NetworkEgressPackets	In Profile Pkts Dropped	ipd
		In Profile Pkts Forwarded	ipf
		Out Of Profile Pkts Dropped	opd
		Out Of Profile Pkts Forwarded	opf
Network Ingress Packet	NetworkIngressPackets	In Profile Pkts Dropped	ipd
		In Profile Pkts Forwarded	ipf
		Out Of Profile Pkts Dropped	opd
		Out Of Profile Pkts Forwarded	opf
Service Egress Octet	ServiceEgressOctets	In Profile Octets Dropped	iod
		In Profile Octets Forwarded	iof
		Out Of Profile Octets Dropped	ood
		Out Of Profile Octets Forwarded	oof
Service Ingress Octet	ServiceIngressOctets	High Octets Dropped	hod
		High Octets Offered	hoo
		In Profile Octets Forwarded	iof
		Low Octets Dropped	lod
		Low Octets Offered	loo
		Out Of Profile Octets Forwarded	oof
		Uncoloured Octets Offered	uco
		Uncoloured Packets Offered	ucp
Service Egress Packet	ServiceEgressPackets	In Profile Pkts Dropped	ipd
		In Profile Pkts Forwarded	ipf
		Out Of Profile Pkts Dropped	opd
		Out Of Profile Pkts Forwarded	opf

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Accounting policy	5620 SAM statistics object	5620 SAM counter	NE counter
Service Ingress Packet	ServiceIngressPackets	High Pkts Dropped	hpd
		High Pkts Offered	hpo
		In Profile Pkts Forwarded	ipf
		Low Pkts Dropped	lpd
		Low Pkts Offered	lpo
		Out Of Profile Pkts Forwarded	opf
		Uncoloured Pkts Offered	ucp

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Table 75-6 lists and defines each accounting statistics counter.

Table 75-6 Accounting statistics counter definitions

Counter name	Definition
All Octets Offered All Packets Offered	Offered packets enter a queue and are dropped or forwarded. An octet value is a packet value expressed in Bytes.
Forwarding Class	The forwarding class of the traffic; this is a classification rather than a counter
High Octets Dropped High Octets Offered High Pkts Dropped High Pkts Offered High Priority Octets Dropped High Priority Octets Offered High Priority Pkts Dropped High Priority Pkts Offered	High-priority packets for a traffic class are marked as in-profile on the ingress classification or based on the interpretation of the QoS marking. Offered packets enter a queue and are dropped or forwarded. Dropped packets are not forwarded through a queue. An octet value is a packet value expressed in Bytes.
In Profile Octets Dropped In Profile Octets Forwarded In Profile Packets Forwarded In Profile Pkts Dropped In Profile Pkts Forwarded	In-profile packets are received at a rate that is lower than the queue CIR. Forwarded packets are sent to an egress queue. Dropped packets are not forwarded through a queue. An octet value is a packet value expressed in Bytes.
Long Duration Flows	Subscriber host application sessions that are longer than 180s in duration
Low Octets Dropped Low Octets Offered Low Pkts Dropped Low Pkts Offered Low Priority Octets Dropped Low Priority Octets Offered Low Priority Pkts Dropped Low Priority Pkts Offered	Low-priority packets for a traffic class are marked as out-of-profile on the ingress classification or based on the interpretation of the QoS marking. Offered packets enter a queue and are dropped or forwarded. Dropped packets are not forwarded through a queue. An octet value is a packet value expressed in Bytes.
Medium Duration Flows	Subscriber host application sessions that are 180s or less in duration

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Counter name	Definition
Net to Sub Active Flows Net to Sub Admit Flows Net to Sub Admit Octets Net to Sub Admit Pkts Net to Sub Deny Flows Net to Sub Deny Octets Net to Sub Deny Pkts	Net to Sub traffic flows from the network to a subscriber. An active flow is a flow that is opened, closed, opened and closed, or continued during a collection interval. Admit objects are objects that are forwarded. Deny objects are objects that are not forwarded. An octet value is a flow or packet value expressed in Bytes.
Num of Subs	The number of subscribers that have the specified flow type during the collection interval
Out Of Profile Octets Dropped Out Of Profile Octets Forwarded Out of Profile Packets Forwarded Out Of Profile Pkts Dropped Out Of Profile Pkts Forwarded	Out-of -profile packets are received at a rate that is higher than the queue CIR. Forwarded packets are sent to an egress queue. Dropped packets are not forwarded through a queue. An octet value is a packet value expressed in Bytes.
Short Duration Flows	Subscriber host application sessions that are 30s or less in duration
Sub to Net Active Flows Sub to Net Admit Flows Sub to Net Admit Octets Sub to Net Admit Pkts Sub to Net Deny Flows Sub to Net Deny Octets Sub to Net Deny Pkts	Sub to Net traffic flows from a subscriber to the network. An active flow is a flow that is opened, closed, opened and closed, or continued during a collection interval. Admit objects are objects that are forwarded. Deny objects are objects that are not forwarded. An octet value is a flow or packet value expressed in Bytes.
Total Flow Duration	Aggregate duration, in seconds, of the completed flows at the time of collection.
Total Flows Completed	The number of flows in each direction that completed during the collection interval.
Total Octets Dropped Total Octets Forwarded Total Packets Dropped Total Packets Forwarded	Offered packets enter a queue and are dropped or forwarded. Forwarded packets are sent to an egress queue. Dropped packets are not forwarded through a queue. An octet value is a packet value expressed in Bytes.
Total Term Flows	The number of flows in each direction that completed during the collection interval.
Uncoloured Octets Offered Uncoloured Packets Offered Uncoloured Pkts Forwarded Uncoloured Pkts Offered	Octets and packets can be modified or colored using color profiles. Color profiling adds the ability to selectively treat packets received on a SAP as in-profile or out-of-profile regardless of the queue forwarding rate. This allows a customer or access device to color a packet out-of-profile with the intention of keeping the in-profile bandwidth for higher-priority packets. Offered packets enter a queue and are dropped or forwarded. Forwarded packets are sent to an egress queue. An octet value is a packet value expressed in Bytes.

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75.4 Server performance statistics

Server performance statistics provide memory usage, alarm counters, and network activity statistics, and are collected on each server in a 5620 SAM server cluster. The information in a performance statistic record includes the following:

- collection timestamp
- collection record type

- source object identifiers
- statistics counters that contain the raw data

Table 75-2 lists and describes the properties in a server performance statistics record.

Table 75-7 Server performance statistics properties

Properties	Description
Monitored Object	Detailed information about the object for which the statistics are collected
Monitored Object Name	Name of the object for which the statistics are collected
Periodic Time	Time difference between one data record collection period and the next
Record Type	Type of collection, for example, Scheduled Full or On-demand
Time Captured	Time when the statistics were collected

Table 75-8 lists each server performance statistics policy type and the types of 5620 SAM servers that the policy monitors.

Table 75-8 Monitored 5620 SAM servers

Server performance statistics policy	Monitored servers
Alarm Rate	Main server Auxiliary server
JMS Durable XML Subscriber Session	JMS server
JMS Subscriber Topic	JMS server
Node Resync	Main server
Publisher Map Event	Main server
Publisher Object Event	Main server
Publisher Queue	Main server
Publisher Realtime Event	Main server
Publisher SAMC Event	Main server
Publisher XML Event	Main server
Server Memory	Main server Auxiliary server JMS server
SNMP Trap	Main server
Statistics Collection	Main server Auxiliary server

Table 75-5 describes the server performance statistics counters.

Table 75-9 Server performance statistics counters

Server performance statistics class	Counter name	Counter description
Alarm Rate	Alarm Total	Total number of alarms
	Cleared	Count of cleared alarms
	Condition	Count of condition alarms
	Critical	Count of critical alarms
	Indeterminate	Count of indeterminate alarms
	Info	Count of information alarms
	Major	Count of major alarms
	Minor	Count of minor alarms
	Warning	Count of warning alarms
JMS Durable XML Subscriber Session	Total Message Count	Total message count for a given durable XML subscriber session
JMS Subscriber Topic	Max Topic Message Count	The maximum message count in a subscription queue for a given topic
	Min Topic Message Count	The minimum message count in a subscription queue for a given topic
	Subscription Count	The total subscription count for a given topic
	Total Topic Message Count	Total messages in all subscription queues for a given topic
Node Resync	Scheduled Resync Failure	Count of failed scheduled resynchronizations
	Scheduled Resync Processed	Count of processed scheduled resynchronizations
	Scheduled Resync Received	Count of scheduled resynchronizations received
	Unscheduled Resync Failure	Count of unscheduled resynchronizations
	Unscheduled Resync Processed	Count of processed unscheduled resynchronizations
	Unscheduled Resync Received	Count of unscheduled resynchronizations received
Publisher Map Event	Edge List Event Count	Count of EdgeListEvent events
	Edge Status Event Count	Count of EdgeStatusEvent events
	Incremental Event Count	Count of IncrementalEvent events
	Incremental Highlight Event Count	Count of IncrementalHighlightEvent events
	Map Service Event Count	Count of MapServiceEvent events
	Vertex Status Event Count	Count of VertexStatusEvent events
	Vertex Topology Event Count	Count of VertexTopologyEvent events
	Vertex Tree Event Count	Count of VertexTreeEvent events
	View Event Count	Count of ViewEvent events

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Server performance statistics class	Counter name	Counter description
Publisher Object Event	Attribute Value Change Context Event Count	Count of AttributeValueChangeContext events
	Delete Event Vessel Count	Count of DeleteEventVessel events
	Event Vessel Count	Total EventVessel count events
	File Available Event Count	Count of FileAvailableEvent events
	Non Persistent Attribute Value Change Event Count	Count of NonPersistentAttributeValueChangeEvent events
	Non Persistent Object Creation Event Count	Count of NonPersistentObjectCreationEvent events
	Non Persistent Object Deletion Event Count	Count NonPersistentObjectDeletionEvent events
	Object Thin Creation Event Count	Count of ObjectThinCreationEvent events
	Olc Update Completed Event Count	Count of OLCUpdateCompletedEvent events
	Text Message Event Count	Count of TextMessageEvent events
	Truncate MOTable Event Count	Count of TruncateMOTableEvent events
Publisher Queue	Object Event In Publisher Queue	Number of outstanding events in the object publisher queue
	Reatime Event In Publisher Queue	number of outstanding events in the real-time publisher queue
	Xml Event In Publisher Queue	Number of outstanding events in the XML publisher queue
Publisher Realtime Event	Realtime Data Communication Failure Count	Count of RealtimeDataCommunicationFailure events
	Realtime Data Event Count	Count of RealtimeDataEvent events
	Realtime Data Failure Count	Count of RealtimeDataFailure events
	Realtime Data Missed Event Count	Count of RealtimeDataMissedEvent events
Publisher SAMC Event	Anw Topology As Event Vessel Count	Count of AnwTopologyAsEventVessel events
	Anw Topology Event Count	Count of AnwTopologyEvent events
	Bgp Rib Info Event Count	Count of BgpRibInfoEvent events
	Bgp Route Targets Event Count	Count of BgpRouteTargetsEvent events
	Cpaa State Change Event Count	Count of CpaaStateChangeEvent events
	Cpam Sim Event Count	Count of CpamSimEvent events
	Cpam State Change Event Count	Count of CpamStateChangeEvent events
	Internal Managed Route Event Count	Count of InternalManagedRouteEvent events
	Operation State Change Event Count	Count of OperationStateChangeEvent events
	Topology Area Event Vessel Count	Count of TopologyAreaEventVessel events
	Topology Error Event Count	Count of TopologyErrorEventCount events
	Topology Event Count	Count of TopologyEvent events

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Server performance statistics class	Counter name	Counter description
Publisher XML Event	Alarm Propagation List Event Count	Count of AlarmPropagationListEvent events
	Alarm Status Change Event Count	Count of AlarmStatusChangeEvent events
	Attribute Value Change Event Count	Count of AttributeValueChangeEvent events
	Db Activity Event Count	Count of DBActivityEvent events
	Db Connection State Change Event Count	Count of DBConnectionStateChangeEvent events
	Db Error Event Count	Count of DBErrorEvent events
	Db Proxy State Change Event Count	Count of DBProxyStateChangeEvent events
	Deployer Event Count	Count of DeployerEvent events
	Exception Event Count	Count of ExceptionEvent events
	Incremental Request Event Count	Count of IncrementalRequestEvent events
	Keep Alive Event Count	Count of KeepAliveEvent events
	Log File Available Event Count	Count of LogFileAvailableEvent events
	Managed Route Event Count	Count of ManagedRouteEvent events
	Object Creation Event Count	Count of ObjectCreationEvent events
	Object Deletion Event Count	Count of ObjectDeletionEvent events
	Relationship Change Event Count	Count of RelationshipChangeEvent events
	Script Execution Event Count	Count of ScriptExecutionEvent events
	State Change Event Count	Count of stateChangeEvent events
	Stats Event Count	Count of StatsEvent events
	Terminate Client Session Count	Count of terminateClientSession events
Server Memory	Committed Heap Memory	Total amount of memory allocated for use by code
	Committed Non Heap Memory	Initial amount of memory allocated to the heap
	Init Heat Memory	Initial amount of memory allocated to the heap
	Init Non Heap Memory	Initial amount of memory allocated for use by code
	Max Heap Memory	Maximum number of kbytes occupied by the heap
	Max Non Heap Memory	Maximum number of kbytes occupied by the code
	Used Heap Memory	Number of kbytes currently occupied by the heap
	Used Non Heap Memory	Number of kbytes currently occupied by code

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Server performance statistics class	Counter name	Counter description
SNMP Trap	Dropped Backpressure	Count of traps dropped due to back pressure from the server
	Dropped Duplicate	Count of duplicate traps dropped
	Dropped Full Resync	Count of traps dropped during a full resynchronization
	Dropped Not Managed	Count of traps dropped from unmanaged NEs
	Dropped Out of Sequence	Count of out of sequence traps dropped
	Dropped Trap Disabled	Count of disabled traps dropped
	Incoming	Count of incoming traps
Statistics Collection	Accounting Stats Failure	Number of failed accounting statistics collections
	Accounting Stats Pending	Number of pending accounting statistics collection requests
	Accounting Stats Processed	Number of processed accounting statistics collection requests
	Accounting Stats Total	Total number of accounting statistics collection requests
	File Accounting Stats Pending	Number of pending accounting statistics collection requests
	File Accounting Stats Processed	Number of processed accounting statistics collection requests
	File Accounting Stats Total	Total number of accounting statistics collection requests
	Scheduled Polling Stats Pending	Number of pending scheduled MIB statistics collection requests
	Scheduled Polling Stats Processed	Number of scheduled MIB statistics processed
	Scheduled Polling Stats Records	Number of scheduled MIB statistics records updated
	Scheduled Polling Stats Total	Total number of scheduled MIB statistics collection requests
	Scheduled Stats Failure	Number of failed unscheduled MIB statistics collection requests
	Unscheduled Polling Stats Pending	Number of pending scheduled MIB statistics collection requests
	Unscheduled Polling Stats Processed	Number of unscheduled MIB statistics processed
	Unscheduled Polling Stats Records	Number of unscheduled MIB statistics records updated
	Unscheduled Polling Stats Total	Total number of unscheduled MIB statistics collection requests
	Unscheduled Stats Failure	Number of failed unscheduled MIB statistics collection requests

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Appendices

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D. 7250 SAS-ES and 7250 SAS-ESA Release 3.0 statistics counters *D-1*

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H. 7710 SR Release 7.0 statistics counters *H-1*

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A. 7210 SAS-E Release 1.0 statistics counters

A.1 7210 SAS-E Release 1.0 statistics counters A-2

A.1 7210 SAS-E Release 1.0 statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for the 7210 SAS-E, Release 1.0. Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.



Note 1 — The tables list the 5620 SAM-supported statistics counters for the current release of the device. Counters that are supported for a previous device release, but not for the current release, are not listed.

Note 2 — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table A-1 lists each statistics package and the associated statistics-counter table.

Table A-1 Statistics packages and counter tables

Package name	See
aclfilter	Table A-2
equipment	Table A-3
ethernetequipment	Table A-4
l2fib	Table A-5
l2fwd	Table A-6
pae802_1x	Table A-7
rtr	Table A-8
service	Table A-9
sitesec	Table A-10
vpls	Table A-11

Table A-2 aclfilter statistics

5620 SAM counter name	Type	MIB counter name	Description
HitCountStats MIB table name: TIMETRA-FILTER-MIB.tIPFilterParamsTable Monitored class: aclfilter.IpFilterEntry			

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5620 SAM counter name	Type	MIB counter name	Description
egressHitCount	UINT128	tIPFilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitCount	UINT128	tIPFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.
MacHitCountStats MIB table name: TIMETRA-FILTER-MIB.tMacFilterParamsTable Monitored class: aclfilter.MacFilterEntry			
egressHitCount	UINT128	tMacFilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitCount	UINT128	tMacFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.

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Table A-3 equipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AllocatedMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryPoolAllocated Monitored class: equipment.SystemStatsHolder			
allocatedMemory	long	sgiMemoryPoolAllocated	The value of sgiMemoryPoolAllocated indicates the total memory currently allocated in memory-pools on the system. This memory may or may not be currently in use, but is pre-allocated should the software need to use it.
AvailableMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryAvailable Monitored class: equipment.SystemStatsHolder			
availableMemory	long	sgiMemoryAvailable	The value of sgiMemoryAvailable indicates the amount of free memory in the overall system that is not allocated to memory pools, but is available in case a memory pool needs to grow.
InterfaceAdditionalStats MIB table name: IF-MIB.ifXTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
receivedBroadcastPackets	UINT128	ifHCInBroadcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of ifInBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedMulticastPackets	UINT128	ifHCInMulticastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifInMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedTotalOctets	UINT128	ifHCInOctets	The total number of octets received on the interface, including framing characters. This object is a 64-bit version of ifInOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	UINT128	ifHCInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of ifInUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedBroadcastPackets	UINT128	ifHCOutBroadcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedMulticastPackets	UINT128	ifHCOutMulticastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifOutMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedTotalOctets	UINT128	ifHCOutOctets	The total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of ifOutOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedUnicastPackets	UINT128	ifHCOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
InterfaceStats MIB table name: IF-MIB.ifTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
outboundBadPackets	long	ifOutErrors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
outboundPacketsDiscarded	long	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedBadPackets	long	ifInErrors	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character- oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedOctets	long	ifInOctets	The total number of octets received on the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedPacketsDiscarded	long	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	long	ifInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnknownProtocolPackets	long	ifInUnknownProtos	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedOctets	long	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedUnicastPackets	long	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
MediaIndependentStats MIB table name: HC-RMON-MIB.mediaIndependentTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dropEvents	long	mediaIndependentDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
droppedFrames	long	mediaIndependentDroppedFrames	The total number of frames which were received by the probe and therefore not accounted for in the mediaIndependentDropEvents, but for which the probe chose not to count for this entry for whatever reason. Most often, this event occurs when the probe is out of some resources and decides to shed load from this collection. This count does not include packets that were not counted because they had MAC-layer errors. Note that, unlike the dropEvents counter, this number is the exact number of frames dropped.
duplex	int	mediaIndependentDuplexMode	The current mode of this link. Note that if the link has full-duplex capabilities but is operating in half-duplex mode, this value will be halfduplex(1).
duplexChanges	long	mediaIndependentDuplexChanges	The number of times this link has changed from full-duplex mode to half-duplex mode or from half-duplex mode to full-duplex mode.
inputSpeed	long	mediaIndependentInputSpeed	The nominal maximum speed in kilobits per second of this half-duplex link or on the inbound connection of this full-duplex link. If the speed is unknown or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
outputSpeed	long	mediaIndependentOutputSpeed	The nominal maximum speed in kilobits per second of this full-duplex link in the direction of the network. If the speed is unknown, the link is half-duplex, or there is no fixed maximum (e.g. a compressed link), this value shall be zero.

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5620 SAM counter name	Type	MIB counter name	Description
receivedBadPackets	long	mediaIndependentInErrors	The total number of bad packets received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedNonUnicastPackets	UINT128	mediaIndependentInNUCastHighCapacityPkts	The total number of non-unicast packets (including bad packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedOctets	UINT128	mediaIndependentInHighCapacityOctets	The total number of octets of data (including those in bad packets) received (excluding framing bits but including FCS octets) on a half-duplex link or on the inbound connection of a full-duplex link.
receivedPackets	UINT128	mediaIndependentInHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
transmittedBadPackets	long	mediaIndependentOutErrors	The total number of bad packets received on a full-duplex link in the direction of the network.
transmittedNonUnicastPackets	UINT128	mediaIndependentOutNUCastHighCapacityPkts	The total number of packets (including bad packets) received on a full-duplex link in the direction of the network.
transmittedOctets	UINT128	mediaIndependentOutHighCapacityOctets	The total number of octets of data (including those in bad packets) received on a full-duplex link in the direction of the network (excluding framing bits but including FCS octets).
transmittedPackets	UINT128	mediaIndependentOutHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a full-duplex link in the direction of the network.
SystemCpuStats MIB table name: TIMETRA-SYSTEM-MIB.sgiCpuUsage Monitored class: equipment.SystemStatsHolder			
systemCpuUsage	long	sgiCpuUsage	The value of sgiCpuUsage indicates the current CPU utilization for the system.
SystemMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryUsed Monitored class: equipment.SystemStatsHolder			
systemMemoryUsage	long	sgiMemoryUsed	The value of sgiMemoryUsed indicates the total pre-allocated pool memory currently in use on the system.
UplinkPortNetIngressStats MIB table name: TIMETRA-SAS-PORT-MIB.tmnxSASPortNetIngressStatsTable Monitored class: equipment.PhysicalPort			
portNetIngressFwdInProfOcts	UINT128	tmnxSASPortNetIngressFwdInProfOcts	tmnxSASPortNetIngressFwdInProfOcts indicates the number of conforming network ingress octets forwarded on this port using this meter.

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5620 SAM counter name	Type	MIB counter name	Description
portNetIngressFwdInProfPkts	UINT128	tmnxSASPortNetIngressFwdInProfPkts	tmnxSASPortNetIngressFwdInProfPkts indicates the number of conforming network ingress packets forwarded on this port using this meter.
portNetIngressFwdOutProfOcts	UINT128	tmnxSASPortNetIngressFwdOutProfOcts	tmnxSASPortNetIngressFwdOutProfOcts indicates the number of exceeding network ingress octets forwarded on this port using this meter.
portNetIngressFwdOutProfPkts	UINT128	tmnxSASPortNetIngressFwdOutProfPkts	tmnxSASPortNetIngressFwdOutProfPkts indicates the number of exceeding network ingress packets forwarded on this port using this meter.
portNetIngressMeterIndex	long	tmnxSASPortNetIngressMeterIndex	tmnxSASPortNetIngressQueueIndex serves as the tertiary index. When used in conjunction with tmnxChassisIndex and tmnxPortPortID, it uniquely identifies a network ingress meter for the specified port in the managed system.

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Table A-4 ethernetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AdditionalEthernetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortEtherTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
highCapacityPackets1519toMaxFrameSize	UINT128	tmnxPortEtherHCPkts1519toMax	The total number of packets (including bad packets) received that were between 1519 octets in length and the maximum frame size, usually 12287 octets inclusive (excluding framing bits but including FCS octets). The lower 32-bits of this 64-bit counter will equal the value of tmnxPortEtherPkt1519toMax. The high 32-bits of this counter will equal the value of tmnxPortEtherHCOverPkts1519toMax.
packets1519toMaxFrameSize	long	tmnxPortEtherPkts1519toMax	The total number of packets received that were longer than 1518 octets but less than the maximum frame size for the particular medium, usually 12287 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
Dot3Stats MIB table name: EtherLike-MIB.dot3StatsTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
alignmentErrors	long	dot3StatsAlignmentErrors	A count of frames received on a particular interface that are not an integral number of octets in length and do not pass the FCS check. The count represented by an instance of this object is incremented when the alignmentError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. This counter does not increment for group encoding schemes greater than 4 bits per group. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsAlignmentErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.7, aAlignmentErrors.
carrierSenseErrors	long	dot3StatsCarrierSenseErrors	The number of times that the carrier sense condition was lost or never asserted when attempting to transmit a frame on a particular interface. The count represented by an instance of this object is incremented at most once per transmission attempt, even if the carrier sense condition fluctuates during a transmission attempt. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.13, aCarrierSenseErrors.

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5620 SAM counter name	Type	MIB counter name	Description
deferredTransmissions	long	dot3StatsDeferredTransmissions	A count of frames for which the first transmission attempt on a particular interface is delayed because the medium is busy. The count represented by an instance of this object does not include frames involved in collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.9, aFramesWithDeferredXmissions.
duplex	int	dot3StatsDuplexStatus	The current mode of operation of the MAC entity. 'unknown' indicates that the current duplex mode could not be determined. Management control of the duplex mode is accomplished through the MAU MIB. When an interface does not support autonegotiation, or when autonegotiation is not enabled, the duplex mode is controlled using ifMauDefaultType. When autonegotiation is supported and enabled, duplex mode is controlled using ifMauAutoNegAdvertisedBits. In either case, the currently operating duplex mode is reflected both in this object and in ifMauType. Note that this object provides redundant information with ifMauType. Normally, redundant objects are discouraged. However, in this instance, it allows a management application to determine the duplex status of an interface without having to know every possible value of ifMauType. This was felt to be sufficiently valuable to justify the redundancy. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.32, aDuplexStatus.
excessiveCollisions	long	dot3StatsExcessiveCollisions	A count of frames for which transmission on a particular interface fails due to excessive collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.11, aFramesAbortedDueToXSColls.

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5620 SAM counter name	Type	MIB counter name	Description
fcsErrors	long	dot3StatsFCSErrors	A count of frames received on a particular interface that are an integral number of octets in length but do not pass the FCS check. This count does not include frames received with frame-too-long or frame-too-short error. The count represented by an instance of this object is incremented when the frameCheckError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. Note: Coding errors detected by the physical layer for speeds above 10 Mb/s will cause the frame to fail the FCS check. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFCSErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.6, aFrameCheckSequenceErrors.
frameTooLongs	long	dot3StatsFrameTooLongs	A count of frames received on a particular interface that exceed the maximum permitted frame size. The count represented by an instance of this object is incremented when the frameTooLong status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. For interfaces operating at 10 Gb/s, this counter can roll over in less than 80 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFrameTooLongs object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.25, aFrameTooLongErrors.

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5620 SAM counter name	Type	MIB counter name	Description
internalMacReceiveErrors	long	dot3StatsInternalMacReceiveErrors	A count of frames for which reception on a particular interface fails due to an internal MAC sublayer receive error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsFrameTooLongs object, the dot3StatsAlignmentErrors object, or the dot3StatsFCSErrors object. The precise meaning of the count represented by an instance of this object is implementation-specific. In particular, an instance of this object may represent a count of receive errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacReceiveErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.15, aFramesLostDueToIntMACRcvError.
internalMacTransmitErrors	long	dot3StatsInternalMacTransmitErrors	A count of frames for which transmission on a particular interface fails due to an internal MAC sublayer transmit error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsLateCollisions object, the dot3StatsExcessiveCollisions object, or the dot3StatsCarrierSenseErrors object. The precise meaning of the count represented by an instance of this object is implementation- specific. In particular, an instance of this object may represent a count of transmission errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacTransmitErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.12, aFramesLostDueToIntMACXmitError.

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5620 SAM counter name	Type	MIB counter name	Description
lateCollisions	long	dot3StatsLateCollisions	The number of times that a collision is detected on a particular interface later than one slotTime into the transmission of a packet. A (late) collision included in a count represented by an instance of this object is also considered as a (generic) collision for purposes of other collision-related statistics. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.10, aLateCollisions.
multipleCollisionFrames	long	dot3StatsMultipleCollisionFrames	A count of frames that are involved in more than one collision and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsSingleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.4, aMultipleCollisionFrames.
singleCollisionFrames	long	dot3StatsSingleCollisionFrames	A count of frames that are involved in a single collision, and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsMultipleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.3, aSingleCollisionFrames.

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5620 SAM counter name	Type	MIB counter name	Description
sqeTestErrors	long	dot3StatsSQETestErrors	A count of times that the SQE TEST ERROR is received on a particular interface. The SQE TEST ERROR is set in accordance with the rules for verification of the SQE detection mechanism in the PLS Carrier Sense Function as described in IEEE Std. 802.3, 2000 Edition, section 7.2.4.6. This counter does not increment on interfaces operating at speeds greater than 10 Mb/s, or on interfaces operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 7.2.4.6, also 30.3.2.1.4, aSQETestErrors.

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5620 SAM counter name	Type	MIB counter name	Description
symbolErrors	long	dot3StatsSymbolErrors	For an interface operating at 100 Mb/s, the number of times there was an invalid data symbol when a valid carrier was present. For an interface operating in half-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than slotTime, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' or 'carrier extend error' on the GMII. For an interface operating in full-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' on the GMII. For an interface operating at 10 Gb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Receive Error' on the XGMII. The count represented by an instance of this object is incremented at most once per carrier event, even if multiple symbol errors occur during the carrier event. This count does not increment if a collision is present. This counter does not increment when the interface is operating at 10 Mb/s. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsSymbolErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.2.1.5, aSymbolErrorDuringCarrier.
EthernetHighCapacityStats MIB table name: HC-RMON-MIB.etherStatsHighCapacityTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
packets1024to1518Octets	UINT128	etherStatsHighCapacityPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
packets128to255Octets	UINT128	etherStatsHighCapacityPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	UINT128	etherStatsHighCapacityPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	UINT128	etherStatsHighCapacityPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	UINT128	etherStatsHighCapacityPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	UINT128	etherStatsHighCapacityPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	UINT128	etherStatsHighCapacityOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). If the network is half-duplex Fast Ethernet, this object can be used as a reasonable estimate of utilization. If greater precision is desired, the etherStatsHighCapacityPkts and etherStatsHighCapacityOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (.96 + .64) + (Octets * .08) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent. This table is not appropriate for monitoring full-duplex ethernets. If the network is a full-duplex ethernet and the mediaIndependentTable is monitoring that network, the utilization can be calculated as follows: 1) Determine the utilization of the inbound path by using the appropriate equation (for ethernet or fast ethernet) to determine the utilization, substituting mediaIndependentInPkts for etherStatsHighCapacityPkts, and mediaIndependentInOctets for etherStatsHighCapacityOctets. Call the resulting utilization inUtilization. 2) Determine the utilization of the outbound path by using the same equation to determine the utilization, substituting mediaIndependentOutPkts for etherStatsHighCapacityPkts, and mediaIndependentOutOctets for etherStatsHighCapacityOctets. Call the resulting utilization outUtilization. 3) The utilization is the maximum of inUtilization and outUtilization. This metric shows the amount of percentage of bandwidth that is left before congestion will be experienced on the link.
totalPackets	UINT128	etherStatsHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
EthernetStats MIB table name: RMON-MIB.etherStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
broadcastPackets	long	etherStatsBroadcastPkts	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets.

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5620 SAM counter name	Type	MIB counter name	Description
collisions	long	etherStatsCollisions	The best estimate of the total number of collisions on this Ethernet segment. The value returned will depend on the location of the RMON probe. Section 8.2.1.3 (10BASE-5) and section 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision, in the receive mode, if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coax segments to which the repeater is connected.
crcAlignErrors	long	etherStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
dropEvents	long	etherStatsDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
fragments	long	etherStatsFragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that it is entirely normal for etherStatsFragments to increment. This is because it counts both runts (which are normal occurrences due to collisions) and noise hits.

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5620 SAM counter name	Type	MIB counter name	Description
jabbers	long	etherStatsJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different than the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition where any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
multicastPackets	long	etherStatsMulticastPkts	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address.
oversizePackets	long	etherStatsOversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
packets1024to1518Octets	long	etherStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).
packets128to255Octets	long	etherStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	long	etherStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	long	etherStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	long	etherStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	long	etherStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	long	etherStatsOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). This object can be used as a reasonable estimate of 10-Megabit ethernet utilization. If greater precision is desired, the etherStatsPkts and etherStatsOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (9.6 + 6.4) + (Octets * .8) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent.
totalPackets	long	etherStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
undersizePackets	long	etherStatsUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.

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Table A-5 l2fib statistics

5620 SAM counter name	Type	MIB counter name	Description
MFibGrpSrcStats MIB table name: TIMETRA-SERV-MIB.tlsMFibGrpSrcStatsTable Monitored class: l2fib.MFibGrpSrc			
forwardedOctets	UINT128	tlsMFibGrpSrcStatsForwardedOctets	tlsMFibGrpSrcStatsForwardedOctets indicates the number of octets that were forwarded to the SAPs and SDPs listed in the tlsMFibInfoTable.
forwardedPkts	UINT128	tlsMFibGrpSrcStatsForwardedPkts	tlsMFibGrpSrcStatsForwardedPkts indicates the number of IPv4 multicast packets that were forwarded to the SAPs and SDPs listed in the tlsMFibInfoTable.

Table A-6 l2fwd statistics

5620 SAM counter name	Type	MIB counter name	Description
AccessInterfaceStpStats MIB table name: TIMETRA-SERV-MIB.sapTlsInfoTable Monitored class: l2fwd.AccessInterfaceStp			

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5620 SAM counter name	Type	MIB counter name	Description
forwardTransitions	long	sapTlsStpForwardTransitions	The value of the object sapTlsStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.
inBadBpdus	long	sapTlsStpInBadBpdus	This object specifies the number of bad BPDUs received on this SAP.
inConfigBpdus	long	sapTlsStpInConfigBpdus	The value of the object sapTlsStpInConfigBpdus indicates the number of Configuration BPDUs received on this SAP.
inRapidSpanningTreeBpdus	long	sapTlsStpInRstBpdus	The value of the object sapTlsStpInRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs received on this SAP.
inTcnBpdus	long	sapTlsStpInTcnBpdus	The value of the object sapTlsStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this SAP.
outConfigBpdus	long	sapTlsStpOutConfigBpdus	The value of the object sapTlsStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this SAP.
outRapidSpanningTreeBpdus	long	sapTlsStpOutRstBpdus	The value of the object sapTlsStpOutRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs sent out on this SAP.
outTcnBpdus	long	sapTlsStpOutTcnBpdus	This object specifies the number of Topology Change Notification BPDUs sent out this SAP.

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Table A-7 pae802_1x statistics

5620 SAM counter name	Type	MIB counter name	Description
PaePortAuthenticatorDiagStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthDiagTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthAuthEapLogoffWhileAuthenticated	long	dot1xAuthAuthEapLogoffWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to DISCONNECTED, as a result of an EAPOL-Logoff message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.12.
dot1xAuthAuthEapLogoffWhileAuthenticating	long	dot1xAuthAuthEapLogoffWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of an EAPOL-Logoff message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.9.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthAuthEapStartsWhileAuthenticated	long	dot1xAuthAuthEapStartsWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to CONNECTING, as a result of an EAPOL-Start message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.11.
dot1xAuthAuthEapStartsWhileAuthenticating	long	dot1xAuthAuthEapStartsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of an EAPOL-Start message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.8.
dot1xAuthAuthFailWhileAuthenticating	long	dot1xAuthAuthFailWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to HELD, as a result of the Backend Authentication state machine indicating authentication failure (authFail = TRUE). REFERENCE 9.4.2, 8.5.4.2.6.
dot1xAuthAuthReauthsWhileAuthenticated	long	dot1xAuthAuthReauthsWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to CONNECTING, as a result of a reauthentication request (reAuthenticate = TRUE). REFERENCE 9.4.2, 8.5.4.2.10.
dot1xAuthAuthReauthsWhileAuthenticating	long	dot1xAuthAuthReauthsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of a reauthentication request (reAuthenticate = TRUE). REFERENCE 9.4.2, 8.5.4.2.7.
dot1xAuthAuthSuccessWhileAuthenticating	long	dot1xAuthAuthSuccessWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to AUTHENTICATED, as a result of the Backend Authentication state machine indicating successful authentication of the Supplicant (authSuccess = TRUE). REFERENCE 9.4.2, 8.5.4.2.4.
dot1xAuthAuthTimeoutsWhileAuthenticating	long	dot1xAuthAuthTimeoutsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of the Backend Authentication state machine indicating authentication timeout (authTimeout = TRUE). REFERENCE 9.4.2, 8.5.4.2.5.
dot1xAuthBackendAccessChallenges	long	dot1xAuthBackendAccessChallenges	Counts the number of times that the state machine receives an initial Access-Challenge packet from the Authentication server (i.e., aReq becomes TRUE, causing exit from the RESPONSE state). Indicates that the Authentication Server has communication with the Authenticator. REFERENCE 9.4.2, 8.5.6.2.2.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthBackendAuthFails	long	dot1xAuthBackendAuthFails	Counts the number of times that the state machine receives an EAP-Failure message from the Authentication Server (i.e., aFail becomes TRUE, causing a transition from RESPONSE to FAIL). Indicates that the Supplicant has not authenticated to the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.6.
dot1xAuthBackendAuthSuccesses	long	dot1xAuthBackendAuthSuccesses	Counts the number of times that the state machine receives an EAP-Success message from the Authentication Server (i.e., aSuccess becomes TRUE, causing a transition from RESPONSE to SUCCESS). Indicates that the Supplicant has successfully authenticated to the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.5.
dot1xAuthBackendNonNakResponsesFromSupplicant	long	dot1xAuthBackendNonNakResponsesFromSupplicant	Counts the number of times that the state machine receives a response from the Supplicant to an initial EAP-Request, and the response is something other than EAP-NAK (i.e., rxResp becomes TRUE, causing the state machine to transition from REQUEST to RESPONSE, and the response is not an EAP-NAK). Indicates that the Supplicant can respond to the Authenticator's chosen EAP-method. REFERENCE 9.4.2, 8.5.6.2.4.
dot1xAuthBackendOtherRequestsToSupplicant	long	dot1xAuthBackendOtherRequestsToSupplicant	Counts the number of times that the state machine sends an EAP-Request packet (other than an Identity, Notification, Failure or Success message) to the Supplicant (i.e., executes txReq on entry to the REQUEST state). Indicates that the Authenticator chose an EAP-method. REFERENCE 9.4.2, 8.5.6.2.3.
dot1xAuthBackendResponses	long	dot1xAuthBackendResponses	Counts the number of times that the state machine sends an initial Access-Request packet to the Authentication server (i.e., executes sendRespToServer on entry to the RESPONSE state). Indicates that the Authenticator attempted communication with the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.1.
dot1xAuthEapLogoffsWhileConnecting	long	dot1xAuthEapLogoffsWhileConnecting	Counts the number of times that the state machine transitions from CONNECTING to DISCONNECTED as a result of receiving an EAPOL-Logoff message. REFERENCE 9.4.2, 8.5.4.2.2.
dot1xAuthEntersAuthenticating	long	dot1xAuthEntersAuthenticating	Counts the number of times that the state machine transitions from CONNECTING to AUTHENTICATING, as a result of an EAP-Response/Identity message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.3.
dot1xAuthEntersConnecting	long	dot1xAuthEntersConnecting	Counts the number of times that the state machine transitions to the CONNECTING state from any other state. REFERENCE 9.4.2, 8.5.4.2.1.

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5620 SAM counter name	Type	MIB counter name	Description
PaePortAuthenticatorSessionStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthSessionStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthSessionAuthenticMethod	int	dot1xAuthSessionAuthenticMethod	The authentication method used to establish the session. REFERENCE 9.4.4, Session Authentication Method.
dot1xAuthSessionFramesRx	long	dot1xAuthSessionFramesRx	The number of user data frames received on this Port during the session. REFERENCE 9.4.4, Session Frames Received.
dot1xAuthSessionFramesTx	long	dot1xAuthSessionFramesTx	The number of user data frames transmitted on this Port during the session. REFERENCE 9.4.4, Session Frames Transmitted.
dot1xAuthSessionOctetsRx	UINT128	dot1xAuthSessionOctetsRx	The number of octets received in user data frames on this Port during the session. REFERENCE 9.4.4, Session Octets Received.
dot1xAuthSessionOctetsTx	UINT128	dot1xAuthSessionOctetsTx	The number of octets transmitted in user data frames on this Port during the session. REFERENCE 9.4.4, Session Octets Transmitted.
dot1xAuthSessionTerminateCause	int	dot1xAuthSessionTerminateCause	The reason for the session termination. REFERENCE 9.4.4, Session Terminate Cause.
dot1xAuthSessionTime	long	dot1xAuthSessionTime	The duration of the session in seconds. REFERENCE 9.4.4, Session Time.
PaePortAuthenticatorStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthEapLengthErrorFramesRx	long	dot1xAuthEapLengthErrorFramesRx	The number of EAPOL frames that have been received by this Authenticator in which the Packet Body Length field is invalid. REFERENCE 9.4.2, EAP length error frames received.
dot1xAuthEapolFramesRx	long	dot1xAuthEapolFramesRx	The number of valid EAPOL frames of any type that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL frames received.
dot1xAuthEapolFramesTx	long	dot1xAuthEapolFramesTx	The number of EAPOL frames of any type that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL frames transmitted.
dot1xAuthEapolLogoffFramesRx	long	dot1xAuthEapolLogoffFramesRx	The number of EAPOL Logoff frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Logoff frames received.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthEapolReqFramesTx	long	dot1xAuthEapolReqFramesTx	The number of EAP Request frames (other than Rq/Id frames) that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL Request frames transmitted.
dot1xAuthEapolReqIdFramesTx	long	dot1xAuthEapolReqIdFramesTx	The number of EAP Req/Id frames that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL Req/Id frames transmitted.
dot1xAuthEapolRespFramesRx	long	dot1xAuthEapolRespFramesRx	The number of valid EAP Response frames (other than Resp/Id frames) that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Response frames received.
dot1xAuthEapolRespIdFramesRx	long	dot1xAuthEapolRespIdFramesRx	The number of EAP Resp/Id frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Resp/Id frames received.
dot1xAuthEapolStartFramesRx	long	dot1xAuthEapolStartFramesRx	The number of EAPOL Start frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Start frames received.
dot1xAuthInvalidEapolFramesRx	long	dot1xAuthInvalidEapolFramesRx	The number of EAPOL frames that have been received by this Authenticator in which the frame type is not recognized. REFERENCE 9.4.2, Invalid EAPOL frames received.
dot1xAuthLastEapolFrameVersion	long	dot1xAuthLastEapolFrameVersion	The protocol version number carried in the most recently received EAPOL frame. REFERENCE 9.4.2, Last EAPOL frame version.

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Table A-8 rtr statistics

5620 SAM counter name	Type	MIB counter name	Description
RouteStats MIB table name: TIMETRA-VRTR-MIB.vRtrStatTable Monitored classes: • rtr.VirtualRouter • vprn.Site			
activeARPEntries	long	vRtrStatActiveARPEntries	vRtrStatActiveARPEntries indicates the number of active ARP entries for the specified virtual router in the system.
directActiveRoutes	long	vRtrDirectActiveRoutes	vRtrDirectActiveRoutes indicates the current number of active direct routes for this instance of the route table.
directRoutes	long	vRtrDirectRoutes	vRtrDirectRoutes indicates the current number of direct routes for this instance of the route table.

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5620 SAM counter name	Type	MIB counter name	Description
routerInterfacesActive	long	vRtrStatActiveIfs	vRtrStatActiveIfs indicates the current number of router interfaces with vRtrIfAdminState equal 'inService' on this virtual router.
routesInVrf	long	vRtrStatCurrNumRoutes	vRtrStatCurrNumRoutes indicates the current number of routes in the VRF for this virtual router.
staticActiveRoutes	long	vRtrStaticActiveRoutes	vRtrStaticActiveRoutes indicates the current number of active static routes for this instance of the route table.
staticRoutes	long	vRtrStaticRoutes	vRtrStaticRoutes indicates the current number of static routes for this instance of the route table.
totalARPEntries	long	vRtrStatTotalARPEntries	vRtrStatTotalARPEntries indicates the total number of active and inactive ARP entries for the specified virtual router in the system.

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Table A-9 service statistics

5620 SAM counter name	Type	MIB counter name	Description
ServiceSapIngQosPlcyStats MIB table name: TIMETRA-SAS-QOS-MIB.sapIngQosMeterStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedInProfOctets	UINT128	sapIngQosMeterStatsForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
forwardedInProfPackets	UINT128	sapIngQosMeterStatsForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
forwardedOutProfOctets	UINT128	sapIngQosMeterStatsForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
forwardedOutProfPackets	UINT128	sapIngQosMeterStatsForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
meterId	long	sapIngQosMeterId	The index of the ingress QoS meter of this SAP.

Table A-10 sitesec statistics

5620 SAM counter name	Type	MIB counter name	Description
MafEntryStats MIB table name: TIMETRA-SECURITY-MIB.tmnxMafMatchTable Monitored class: sitesec.MafEntry			
matchCount	UINT128	tmnxMafMatchCount	The value of tmnxMafMatchCount indicates the number of times a management packet has matched this filter entry.

Table A-11 vpls statistics

5620 SAM counter name	Type	MIB counter name	Description
L2AccessInterfaceIgmpSnpgErrorStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sapIgmpSnpgStatsTable Monitored classes: • vpls.AbstractL2AccessInterface • vpls.IL2AccessInterface • mvpls.IL2AccessInterface			
sapIgmpSnpgImportPolicyDrops	long	sapIgmpSnpgImportPolicyDrops	The value of the object sapIgmpSnpgImportPolicyDrops indicates the number of times an IGMP Group or Source is dropped because of applying an import policy on this SAP.
sapIgmpSnpgMaxNumGroupsDrops	long	sapIgmpSnpgMaxNumGroupsDrops	The value of the object sapIgmpSnpgMaxNumGroupsDrops indicates the number of times an IGMP Group is dropped because of exceeding the configured maximum number of groups on this SAP.
sapIgmpSnpgRxBadEncodedPkts	long	sapIgmpSnpgRxBadEncodedPkts	The value of the object sapIgmpSnpgRxBadEncodedPkts indicates the number of IGMP packets dropped on this SAP because of a bad encoding.
sapIgmpSnpgRxBadIgmpChksmPkts	long	sapIgmpSnpgRxBadIgmpChksmPkts	The value of the object sapIgmpSnpgRxBadIgmpChksmPkts indicates the number of dropped IGMP packets on this SAP because of a bad IGMP header checksum.
sapIgmpSnpgRxBadIpChksmPkts	long	sapIgmpSnpgRxBadIpChksmPkts	The value of the object sapIgmpSnpgRxBadIpChksmPkts indicates the number of dropped IGMP packets on this SAP because of a bad IPv4 header checksum.
sapIgmpSnpgRxBadLenPkts	long	sapIgmpSnpgRxBadLenPkts	The value of the object sapIgmpSnpgRxBadLenPkts indicates the number of IGMP packets dropped on this SAP because of a bad length.

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgRxNoRtrAlertPkts	long	sapIgmpSnpgRxNoRtrAlertPkts	The value of the object sapIgmpSnpgRxNoRtrAlertPkts indicates the number of IGMP packets dropped on this SAP because the Router Alert Option in the IP packet is not set.
sapIgmpSnpgRxWrongVersionPkts	long	sapIgmpSnpgRxWrongVersionPkts	The value of the object sapIgmpSnpgRxWrongVersionPkts indicates the total number of IGMP packets with a wrong version received on this SAP.
sapIgmpSnpgRxZeroSrcAdrPkts	long	sapIgmpSnpgRxZeroSrcAdrPkts	The value of the object sapIgmpSnpgRxZeroSrcAdrPkts indicates the number of IGMP packets dropped on this SAP because they contain a zero source IPv4 address.
sapIgmpSnpgSendQueryCfgDrops	long	sapIgmpSnpgSendQueryCfgDrops	The value of the object sapIgmpSnpgSendQueryCfgDrops indicates the number of times an IGMP Query is dropped because the object sapIgmpSnpgCfgSendQueries for this SAP is set to enabled.
L2AccessInterfaceIgmpSnpgStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sapIgmpSnpgStatsTable Monitored classes: • vpls.AbstractL2AccessInterface • vpls.IL2AccessInterface • mvpls.IL2AccessInterface			
sapIgmpSnpgFwdGenQueries	long	sapIgmpSnpgFwdGenQueries	The value of the object sapIgmpSnpgFwdGenQueries indicates the number of IGMP General Queries forwarded on this SAP.
sapIgmpSnpgFwdGrpSpecQueries	long	sapIgmpSnpgFwdGrpSpecQueries	The value of the object sapIgmpSnpgFwdGrpSpecQueries indicates the number of IGMP Group-Specific Queries forwarded on this SAP.
sapIgmpSnpgFwdUnknownType	long	sapIgmpSnpgFwdUnknownType	The value of the object sapIgmpSnpgFwdUnknownType indicates the number of IGMP unknown type packets forwarded on this SAP.
sapIgmpSnpgFwdV1Reports	long	sapIgmpSnpgFwdV1Reports	The value of the object sapIgmpSnpgFwdV1Reports indicates the number of IGMPv1 Reports forwarded on this SAP.
sapIgmpSnpgFwdV2Leaves	long	sapIgmpSnpgFwdV2Leaves	The value of the object sapIgmpSnpgFwdV2Leaves indicates the number of IGMPv2 Leaves forwarded on this SAP.
sapIgmpSnpgFwdV2Reports	long	sapIgmpSnpgFwdV2Reports	The value of the object sapIgmpSnpgFwdV2Reports indicates the number of IGMPv2 Reports forwarded on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgRxGenQueries	long	sapIgmpSnpgRxGenQueries	The value of the object sapIgmpSnpgRxGenQueries indicates the number of IGMP General Queries received on this SAP.
sapIgmpSnpgRxGrpSpecQueries	long	sapIgmpSnpgRxGrpSpecQueries	The value of the object sapIgmpSnpgRxGrpSpecQueries indicates the number of IGMP Group-Specific Queries received on this SAP.
sapIgmpSnpgRxUnknownType	long	sapIgmpSnpgRxUnknownType	The value of the object sapIgmpSnpgRxUnknownType indicates the number of IGMP unknown type packets received on this SAP.
sapIgmpSnpgRxV1Reports	long	sapIgmpSnpgRxV1Reports	The value of the object sapIgmpSnpgRxV1Reports indicates the number of IGMPv1 Reports received on this SAP.
sapIgmpSnpgRxV2Leaves	long	sapIgmpSnpgRxV2Leaves	The value of the object sapIgmpSnpgRxV2Leaves indicates the number of IGMPv2 Leaves received on this SAP.
sapIgmpSnpgRxV2Reports	long	sapIgmpSnpgRxV2Reports	The value of the object sapIgmpSnpgRxV2Reports indicates the number of IGMPv2 Reports received on this SAP.
sapIgmpSnpgTxGenQueries	long	sapIgmpSnpgTxGenQueries	The value of the object sapIgmpSnpgTxGenQueries indicates the number of IGMP General Queries transmitted on this SAP.
sapIgmpSnpgTxGrpSpecQueries	long	sapIgmpSnpgTxGrpSpecQueries	The value of the object sapIgmpSnpgTxGrpSpecQueries indicates the number of IGMP Group-Specific Queries transmitted on this SAP.
sapIgmpSnpgTxV1Reports	long	sapIgmpSnpgTxV1Reports	The value of the object sapIgmpSnpgTxV1Reports indicates the number of IGMPv1 Reports transmitted on this SAP.
sapIgmpSnpgTxV2Leaves	long	sapIgmpSnpgTxV2Leaves	The value of the object sapIgmpSnpgTxV2Leaves indicates the number of IGMPv2 Leaves transmitted on this SAP.
sapIgmpSnpgTxV2Reports	long	sapIgmpSnpgTxV2Reports	The value of the object sapIgmpSnpgTxV2Reports indicates the number of IGMPv2 Reports transmitted on this SAP.

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B. 7210 SAS-M Release 1.0 statistics counters

B.1 7210 SAS-M Release 1.0 statistics counters B-2

B.1 7210 SAS-M Release 1.0 statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for the 7210 SAS-M, Release 1.0. Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.



Note 1 — The tables list the 5620 SAM-supported statistics counters for the current release of the device. Counters that are supported for a previous device release, but not for the current release, are not listed.

Note 2 — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table B-1 lists each statistics package and the associated statistics-counter table.

Table B-1 Statistics packages and counter tables

Package name	See
aclfilter	Table B-2
equipment	Table B-3
ethernetequipment	Table B-4
isis	Table B-5
l2fwd	Table B-6
lag	Table B-7
ldp	Table B-8
mpls	Table B-9
ospf	Table B-10
pae802_1x	Table B-11
rsvp	Table B-12
rtr	Table B-13
service	Table B-14
sitesec	Table B-15
svt	Table B-16

Table B-2 aclfilter statistics

5620 SAM counter name	Type	MIB counter name	Description
HitCountStats MIB table name: TIMETRA-FILTER-MIB.tIPFilterParamsTable Monitored class: aclfilter.IpFilterEntry			
egressHitCount	UINT128	tIPFilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitCount	UINT128	tIPFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.
MacHitCountStats MIB table name: TIMETRA-FILTER-MIB.tMacFilterParamsTable Monitored class: aclfilter.MacFilterEntry			
egressHitCount	UINT128	tMacFilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitCount	UINT128	tMacFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.

Table B-3 equipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AllocatedMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryPoolAllocated Monitored class: equipment.SystemStatsHolder			
allocatedMemory	long	sgiMemoryPoolAllocated	The value of sgiMemoryPoolAllocated indicates the total memory currently allocated in memory-pools on the system. This memory may or may not be currently in use, but is pre-allocated should the software need to use it.
AvailableMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryAvailable Monitored class: equipment.SystemStatsHolder			
availableMemory	long	sgiMemoryAvailable	The value of sgiMemoryAvailable indicates the amount of free memory in the overall system that is not allocated to memory pools, but is available in case a memory pool needs to grow.
InterfaceAdditionalStats MIB table name: IF-MIB.ifXTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			

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5620 SAM counter name	Type	MIB counter name	Description
receivedBroadcastPackets	UINT128	ifHCInBroadcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of ifInBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedMulticastPackets	UINT128	ifHCInMulticastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifInMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedTotalOctets	UINT128	ifHCInOctets	The total number of octets received on the interface, including framing characters. This object is a 64-bit version of ifInOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	UINT128	ifHCInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of ifInUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedBroadcastPackets	UINT128	ifHCOutBroadcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedMulticastPackets	UINT128	ifHCOutMulticastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifOutMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedTotalOctets	UINT128	ifHCOutOctets	The total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of ifOutOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	UINT128	ifHCOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
InterfaceStats MIB table name: IF-MIB.ifTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
outboundBadPackets	long	ifOutErrors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
outboundPacketsDiscarded	long	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedBadPackets	long	ifInErrors	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character- oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedOctets	long	ifInOctets	The total number of octets received on the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedPacketsDiscarded	long	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	long	ifInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedUnknownProtocolPackets	long	ifInUnknownProtos	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedOctets	long	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	long	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
MediaIndependentStats MIB table name: HC-RMON-MIB.mediaIndependentTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dropEvents	long	mediaIndependentDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
droppedFrames	long	mediaIndependentDroppedFrames	The total number of frames which were received by the probe and therefore not accounted for in the mediaIndependentDropEvents, but for which the probe chose not to count for this entry for whatever reason. Most often, this event occurs when the probe is out of some resources and decides to shed load from this collection. This count does not include packets that were not counted because they had MAC-layer errors. Note that, unlike the dropEvents counter, this number is the exact number of frames dropped.

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5620 SAM counter name	Type	MIB counter name	Description
duplex	int	mediaIndependentDuplexMode	The current mode of this link. Note that if the link has full-duplex capabilities but is operating in half-duplex mode, this value will be halfduplex(1).
duplexChanges	long	mediaIndependentDuplexChanges	The number of times this link has changed from full-duplex mode to half-duplex mode or from half-duplex mode to full-duplex mode.
inputSpeed	long	mediaIndependentInputSpeed	The nominal maximum speed in kilobits per second of this half-duplex link or on the inbound connection of this full-duplex link. If the speed is unknown or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
outputSpeed	long	mediaIndependentOutputSpeed	The nominal maximum speed in kilobits per second of this full-duplex link in the direction of the network. If the speed is unknown, the link is half-duplex, or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
receivedBadPackets	long	mediaIndependentInErrors	The total number of bad packets received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedNonUnicastPackets	UINT128	mediaIndependentInNUCastHighCapacityPkts	The total number of non-unicast packets (including bad packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedOctets	UINT128	mediaIndependentInHighCapacityOctets	The total number of octets of data (including those in bad packets) received (excluding framing bits but including FCS octets) on a half-duplex link or on the inbound connection of a full-duplex link.
receivedPackets	UINT128	mediaIndependentInHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
transmittedBadPackets	long	mediaIndependentOutErrors	The total number of bad packets received on a full-duplex link in the direction of the network.
transmittedNonUnicastPackets	UINT128	mediaIndependentOutNUCastHighCapacityPkts	The total number of packets (including bad packets) received on a full-duplex link in the direction of the network.
transmittedOctets	UINT128	mediaIndependentOutHighCapacityOctets	The total number of octets of data (including those in bad packets) received on a full-duplex link in the direction of the network (excluding framing bits but including FCS octets).
transmittedPackets	UINT128	mediaIndependentOutHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a full-duplex link in the direction of the network.

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5620 SAM counter name	Type	MIB counter name	Description
PortAccessEgressQueueStats MIB table name: TIMETRA-SAS-PORT-MIB.tmnxPortAccessEgressQueueStatsTable Monitored class: equipment.PhysicalPort			
portAccessEgressQueueStatsDroOcts	UINT128	tmnxPortAccessEgressQueueStatsDroOcts	tmnxPortAccessEgressQueueStatsDroOcts indicates the number of dropped network egress octets on this port using this queue.
portAccessEgressQueueStatsDroPkts	UINT128	tmnxPortAccessEgressQueueStatsDroPkts	tmnxPortAccessEgressQueueStatsDroPkts indicates the number of dropped access egress packets on this port using this queue.
portAccessEgressQueueStatsFwdOcts	UINT128	tmnxPortAccessEgressQueueStatsFwdOcts	tmnxPortAccessEgressQueueStatsFwdOcts indicates the number of forward access egress octets forwarded on this port using this queue.
portAccessEgressQueueStatsFwdPkts	UINT128	tmnxPortAccessEgressQueueStatsFwdPkts	tmnxPortAccessEgressQueueStatsFwdPkts indicates the number of forwarded access egress packets forwarded on this port using this queue.
portAccessEgressQueueStatsIndex	long	tmnxPortAccessEgressQueueStatsIndex	tmnxPortAccessEgressQueueIndex serves as the tertiary index. When used in conjunction with tmnxChassisIndex and tmnxPortPortID, it uniquely identifies a access egress queue for the specified port in the managed system.
PortNetEgressQueueStats MIB table name: TIMETRA-SAS-PORT-MIB.tmnxPortNetEgressQueueStatsTable Monitored class: equipment.PhysicalPort			
portNetEgressQueueStatsDroOcts	UINT128	tmnxPortNetEgressQueueStatsDroOcts	tmnxPortNetEgressQueueStatsDroOcts indicates the number of dropped network egress octets on this port using this queue.
portNetEgressQueueStatsDroPkts	UINT128	tmnxPortNetEgressQueueStatsDroPkts	tmnxPortNetEgressQueueStatsDroPkts indicates the number of dropped network egress packets on this port using this queue.
portNetEgressQueueStatsFwdOcts	UINT128	tmnxPortNetEgressQueueStatsFwdOcts	tmnxPortNetEgressQueueStatsFwdOcts indicates the number of forwarded network egress octets on this port using this queue.
portNetEgressQueueStatsFwdPkts	UINT128	tmnxPortNetEgressQueueStatsFwdPkts	tmnxPortNetEgressQueueStatsFwdPkts indicates the number of forwarded network egress packets on this port using this queue.
portNetEgressQueueStatsIndex	long	tmnxPortNetEgressQueueStatsIndex	tmnxPortNetEgressQueueStatsIndex serves as the tertiary index. When used in conjunction with tmnxChassisIndex and tmnxPortPortID, it uniquely identifies a network egress queue for the specified port in the managed system.
PortNetIngressStats MIB table name: TIMETRA-PORT-MIB.tmnxPortNetIngressStatsTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
inProfileOctetsDropped	UINT128	tmnxPortNetIngressDroInProfOcts	tmnxPortNetIngressDroInProfOcts indicates the number of conforming network ingress octets dropped on this port using this queue.
inProfileOctetsForwarded	UINT128	tmnxPortNetIngressFwdInProfOcts	tmnxPortNetIngressFwdInProfOcts indicates the number of conforming network ingress octets forwarded on this port using this queue.
inProfilePacketsDropped	UINT128	tmnxPortNetIngressDroInProfPkts	tmnxPortNetIngressDroInProfPkts indicates the number of conforming network ingress packets dropped on this port using this queue.
inProfilePacketsForwarded	UINT128	tmnxPortNetIngressFwdInProfPkts	tmnxPortNetIngressFwdInProfPkts indicates the number of conforming network ingress packets forwarded on this port using this queue.
outOfProfileOctetsDropped	UINT128	tmnxPortNetIngressDroOutProfOcts	tmnxPortNetIngressDroOutProfOcts indicates the number of exceeding network ingress octets dropped on this port using this queue.
outOfProfileOctetsForwarded	UINT128	tmnxPortNetIngressFwdOutProfOcts	tmnxPortNetIngressFwdOutProfOcts indicates the number of exceeding network ingress octets forwarded on this port using this queue.
outOfProfilePacketsDropped	UINT128	tmnxPortNetIngressDroOutProfPkts	tmnxPortNetIngressDroOutProfPkts indicates the number of exceeding network ingress packets dropped on this port using this queue.
outOfProfilePacketsForwarded	UINT128	tmnxPortNetIngressFwdOutProfPkts	tmnxPortNetIngressFwdOutProfPkts indicates the number of exceeding network ingress packets forwarded on this port using this queue.
SystemCpuStats MIB table name: TIMETRA-SYSTEM-MIB.sgiCpuUsage Monitored class: equipment.SystemStatsHolder			
systemCpuUsage	long	sgiCpuUsage	The value of sgiCpuUsage indicates the current CPU utilization for the system.
SystemMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryUsed Monitored class: equipment.SystemStatsHolder			
systemMemoryUsage	long	sgiMemoryUsed	The value of sgiMemoryUsed indicates the total pre-allocated pool memory currently in use on the system.

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Table B-4 ethernetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AdditionalEthernetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortEtherTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
highCapacityPackets1519toMaxFrameSize	UINT128	tmnxPortEtherHCPkts1519toMax	The total number of packets (including bad packets) received that were between 1519 octets in length and the maximum frame size, usually 12287 octets inclusive (excluding framing bits but including FCS octets). The lower 32-bits of this 64-bit counter will equal the value of tmnxPortEtherPkt1519toMax. The high 32-bits of this counter will equal the value of tmnxPortEtherHCOverPkts1519toMax.
packets1519toMaxFrameSize	long	tmnxPortEtherPkts1519toMax	The total number of packets received that were longer than 1518 octets but less than the maximum frame size for the particular medium, usually 12287 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
Dot3Stats MIB table name: EtherLike-MIB.dot3StatsTable Monitored class: equipment.PhysicalPort			
alignmentErrors	long	dot3StatsAlignmentErrors	A count of frames received on a particular interface that are not an integral number of octets in length and do not pass the FCS check. The count represented by an instance of this object is incremented when the alignmentError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. This counter does not increment for group encoding schemes greater than 4 bits per group. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsAlignmentErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.7, aAlignmentErrors.

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5620 SAM counter name	Type	MIB counter name	Description
carrierSenseErrors	long	dot3StatsCarrierSenseErrors	The number of times that the carrier sense condition was lost or never asserted when attempting to transmit a frame on a particular interface. The count represented by an instance of this object is incremented at most once per transmission attempt, even if the carrier sense condition fluctuates during a transmission attempt. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.13, aCarrierSenseErrors.
deferredTransmissions	long	dot3StatsDeferredTransmissions	A count of frames for which the first transmission attempt on a particular interface is delayed because the medium is busy. The count represented by an instance of this object does not include frames involved in collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.9, aFramesWithDeferredXmissions.
duplex	int	dot3StatsDuplexStatus	The current mode of operation of the MAC entity. 'unknown' indicates that the current duplex mode could not be determined. Management control of the duplex mode is accomplished through the MAU MIB. When an interface does not support autonegotiation, or when autonegotiation is not enabled, the duplex mode is controlled using ifMauDefaultType. When autonegotiation is supported and enabled, duplex mode is controlled using ifMauAutoNegAdvertisedBits. In either case, the currently operating duplex mode is reflected both in this object and in ifMauType. Note that this object provides redundant information with ifMauType. Normally, redundant objects are discouraged. However, in this instance, it allows a management application to determine the duplex status of an interface without having to know every possible value of ifMauType. This was felt to be sufficiently valuable to justify the redundancy. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.32, aDuplexStatus.

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5620 SAM counter name	Type	MIB counter name	Description
excessiveCollisions	long	dot3StatsExcessiveCollisions	A count of frames for which transmission on a particular interface fails due to excessive collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.11, aFramesAbortedDueToXSColls.
fcsErrors	long	dot3StatsFCSErrors	A count of frames received on a particular interface that are an integral number of octets in length but do not pass the FCS check. This count does not include frames received with frame-too-long or frame-too-short error. The count represented by an instance of this object is incremented when the frameCheckError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. Note: Coding errors detected by the physical layer for speeds above 10 Mb/s will cause the frame to fail the FCS check. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFCSErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.6, aFrameCheckSequenceErrors.

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5620 SAM counter name	Type	MIB counter name	Description
frameTooLongs	long	dot3StatsFrameTooLongs	A count of frames received on a particular interface that exceed the maximum permitted frame size. The count represented by an instance of this object is incremented when the frameTooLong status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. For interfaces operating at 10 Gb/s, this counter can roll over in less than 80 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFrameTooLongs object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.25, aFrameTooLongErrors.
internalMacReceiveErrors	long	dot3StatsInternalMacReceiveErrors	A count of frames for which reception on a particular interface fails due to an internal MAC sublayer receive error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsFrameTooLongs object, the dot3StatsAlignmentErrors object, or the dot3StatsFCSErrors object. The precise meaning of the count represented by an instance of this object is implementation-specific. In particular, an instance of this object may represent a count of receive errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacReceiveErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.15, aFramesLostDueToIntMACRcvError.

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5620 SAM counter name	Type	MIB counter name	Description
internalMacTransmitErrors	long	dot3StatsInternalMacTransmitErrors	A count of frames for which transmission on a particular interface fails due to an internal MAC sublayer transmit error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsLateCollisions object, the dot3StatsExcessiveCollisions object, or the dot3StatsCarrierSenseErrors object. The precise meaning of the count represented by an instance of this object is implementation- specific. In particular, an instance of this object may represent a count of transmission errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacTransmitErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.12, aFramesLostDueToIntMACXmitError.
lateCollisions	long	dot3StatsLateCollisions	The number of times that a collision is detected on a particular interface later than one slotTime into the transmission of a packet. A (late) collision included in a count represented by an instance of this object is also considered as a (generic) collision for purposes of other collision-related statistics. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.10, aLateCollisions.

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5620 SAM counter name	Type	MIB counter name	Description
multipleCollisionFrames	long	dot3StatsMultipleCollisionFrames	A count of frames that are involved in more than one collision and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsSingleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.4, aMultipleCollisionFrames.
singleCollisionFrames	long	dot3StatsSingleCollisionFrames	A count of frames that are involved in a single collision, and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsMultipleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.3, aSingleCollisionFrames.
sqeTestErrors	long	dot3StatsSQETestErrors	A count of times that the SQE TEST ERROR is received on a particular interface. The SQE TEST ERROR is set in accordance with the rules for verification of the SQE detection mechanism in the PLS Carrier Sense Function as described in IEEE Std. 802.3, 2000 Edition, section 7.2.4.6. This counter does not increment on interfaces operating at speeds greater than 10 Mb/s, or on interfaces operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 7.2.4.6, also 30.3.2.1.4, aSQETestErrors.

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5620 SAM counter name	Type	MIB counter name	Description
symbolErrors	long	dot3StatsSymbolErrors	For an interface operating at 100 Mb/s, the number of times there was an invalid data symbol when a valid carrier was present. For an interface operating in half-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than slotTime, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' or 'carrier extend error' on the GMII. For an interface operating in full-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' on the GMII. For an interface operating at 10 Gb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Receive Error' on the XGMII. The count represented by an instance of this object is incremented at most once per carrier event, even if multiple symbol errors occur during the carrier event. This count does not increment if a collision is present. This counter does not increment when the interface is operating at 10 Mb/s. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsSymbolErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.2.1.5, aSymbolErrorDuringCarrier.
EthernetHighCapacityStats MIB table name: HC-RMON-MIB.etherStatsHighCapacityTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
packets1024to1518Octets	UINT128	etherStatsHighCapacityPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
packets128to255Octets	UINT128	etherStatsHighCapacityPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	UINT128	etherStatsHighCapacityPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	UINT128	etherStatsHighCapacityPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	UINT128	etherStatsHighCapacityPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	UINT128	etherStatsHighCapacityPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	UINT128	etherStatsHighCapacityOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). If the network is half-duplex Fast Ethernet, this object can be used as a reasonable estimate of utilization. If greater precision is desired, the etherStatsHighCapacityPkts and etherStatsHighCapacityOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (.96 + .64) + (Octets * .08) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent. This table is not appropriate for monitoring full-duplex ethernets. If the network is a full-duplex ethernet and the mediaIndependentTable is monitoring that network, the utilization can be calculated as follows: 1) Determine the utilization of the inbound path by using the appropriate equation (for ethernet or fast ethernet) to determine the utilization, substituting mediaIndependentInPkts for etherStatsHighCapacityPkts, and mediaIndependentInOctets for etherStatsHighCapacityOctets. Call the resulting utilization inUtilization. 2) Determine the utilization of the outbound path by using the same equation to determine the utilization, substituting mediaIndependentOutPkts for etherStatsHighCapacityPkts, and mediaIndependentOutOctets for etherStatsHighCapacityOctets. Call the resulting utilization outUtilization. 3) The utilization is the maximum of inUtilization and outUtilization. This metric shows the amount of percentage of bandwidth that is left before congestion will be experienced on the link.
totalPackets	UINT128	etherStatsHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
EthernetStats MIB table name: RMON-MIB.etherStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
broadcastPackets	long	etherStatsBroadcastPkts	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets.

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5620 SAM counter name	Type	MIB counter name	Description
collisions	long	etherStatsCollisions	The best estimate of the total number of collisions on this Ethernet segment. The value returned will depend on the location of the RMON probe. Section 8.2.1.3 (10BASE-5) and section 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision, in the receive mode, if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coax segments to which the repeater is connected.
crcAlignErrors	long	etherStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
dropEvents	long	etherStatsDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
fragments	long	etherStatsFragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that it is entirely normal for etherStatsFragments to increment. This is because it counts both runts (which are normal occurrences due to collisions) and noise hits.

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5620 SAM counter name	Type	MIB counter name	Description
jabbers	long	etherStatsJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different than the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition where any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
multicastPackets	long	etherStatsMulticastPkts	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address.
oversizePackets	long	etherStatsOversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
packets1024to1518Octets	long	etherStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).
packets128to255Octets	long	etherStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	long	etherStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	long	etherStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	long	etherStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	long	etherStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	long	etherStatsOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). This object can be used as a reasonable estimate of 10-Megabit ethernet utilization. If greater precision is desired, the etherStatsPkts and etherStatsOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (9.6 + 6.4) + (Octets * .8) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent.
totalPackets	long	etherStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
undersizePackets	long	etherStatsUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.
QosDroppedOctetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortIngrMdaQosStatTable Monitored class: equipment.PhysicalPort			
qosClassifier0DroppedOctets	UINT128	tmnxPortIngrMdaQos00StatDropOcts	tmnxPortIngrMdaQos00StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier10DroppedOctets	UINT128	tmnxPortIngrMdaQos10StatDropOcts	tmnxPortIngrMdaQos10StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier11DroppedOctets	UINT128	tmnxPortIngrMdaQos11StatDropOcts	tmnxPortIngrMdaQos11StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier12DroppedOctets	UINT128	tmnxPortIngrMdaQos12StatDropOcts	tmnxPortIngrMdaQos12StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier13DroppedOctets	UINT128	tmnxPortIngrMdaQos13StatDropOcts	tmnxPortIngrMdaQos13StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier14DroppedOctets	UINT128	tmnxPortIngrMdaQos14StatDropOcts	tmnxPortIngrMdaQos14StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier15DroppedOctets	UINT128	tmnxPortIngrMdaQos15StatDropOcts	tmnxPortIngrMdaQos15StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier1DroppedOctets	UINT128	tmnxPortIngrMdaQos01StatDropOcts	tmnxPortIngrMdaQos01StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier2DroppedOctets	UINT128	tmnxPortIngrMdaQos02StatDropOcts	tmnxPortIngrMdaQos02StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier3DroppedOctets	UINT128	tmnxPortIngrMdaQos03StatDropOcts	tmnxPortIngrMdaQos03StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier4DroppedOctets	UINT128	tmnxPortIngrMdaQos04StatDropOcts	tmnxPortIngrMdaQos04StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier5DroppedOctets	UINT128	tmnxPortIngrMdaQos05StatDropOcts	tmnxPortIngrMdaQos05StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier6DroppedOctets	UINT128	tmnxPortIngrMdaQos06StatDropOcts	tmnxPortIngrMdaQos06StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier7DroppedOctets	UINT128	tmnxPortIngrMdaQos07StatDropOcts	tmnxPortIngrMdaQos07StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier8DroppedOctets	UINT128	tmnxPortIngrMdaQos08StatDropOcts	tmnxPortIngrMdaQos08StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier9DroppedOctets	UINT128	tmnxPortIngrMdaQos09StatDropOcts	tmnxPortIngrMdaQos09StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
QosDroppedPacketStats MIB table name: TIMETRA-PORT-MIB.tmnxPortIngrMdaQosStatTable Monitored class: equipment.PhysicalPort			
qosClassifier0DroppedPackets	UINT128	tmnxPortIngrMdaQos00StatDropPkts	tmnxPortIngrMdaQos00StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier10DroppedPackets	UINT128	tmnxPortIngrMdaQos10StatDropPkts	tmnxPortIngrMdaQos10StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier11DroppedPackets	UINT128	tmnxPortIngrMdaQos11StatDropPkts	tmnxPortIngrMdaQos11StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier12DroppedPackets	UINT128	tmnxPortIngrMdaQos12StatDropPkts	tmnxPortIngrMdaQos12StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier13DroppedPackets	UINT128	tmnxPortIngrMdaQos13StatDropPkts	tmnxPortIngrMdaQos13StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier14DroppedPackets	UINT128	tmnxPortIngrMdaQos14StatDropPkts	tmnxPortIngrMdaQos14StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier15DroppedPackets	UINT128	tmnxPortIngrMdaQos15StatDropPkts	tmnxPortIngrMdaQos15StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier1DroppedPackets	UINT128	tmnxPortIngrMdaQos01StatDropPkts	tmnxPortIngrMdaQos01StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier2DroppedPackets	UINT128	tmnxPortIngrMdaQos02StatDropPkts	tmnxPortIngrMdaQos02StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier3DroppedPackets	UINT128	tmnxPortIngrMdaQos03StatDropPkts	tmnxPortIngrMdaQos03StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier4DroppedPackets	UINT128	tmnxPortIngrMdaQos04StatDropPkts	tmnxPortIngrMdaQos04StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier5DroppedPackets	UINT128	tmnxPortIngrMdaQos05StatDropPkts	tmnxPortIngrMdaQos05StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier6DroppedPackets	UINT128	tmnxPortIngrMdaQos06StatDropPkts	tmnxPortIngrMdaQos06StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier7DroppedPackets	UINT128	tmnxPortIngrMdaQos07StatDropPkts	tmnxPortIngrMdaQos07StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier8DroppedPackets	UINT128	tmnxPortIngrMdaQos08StatDropPkts	tmnxPortIngrMdaQos08StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier9DroppedPackets	UINT128	tmnxPortIngrMdaQos09StatDropPkts	tmnxPortIngrMdaQos09StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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Table B-5 isis statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceLevelOneReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).

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5620 SAM counter name	Type	MIB counter name	Description
InterfaceLevelOneSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
LinkStatePduSiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			

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5620 SAM counter name	Type	MIB counter name	Description
csnpDropped	long	vRtrIsisCSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisCSNPDrop.
csnpReceived	long	vRtrIsisCSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisCSNPRecd.
csnpRetransmitted	long	vRtrIsisCSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisCSNPRetrans.
csnpSent	long	vRtrIsisCSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisCSNPSent.
helloDropped	long	vRtrIsisIIHDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisIIHDrop.
helloReceived	long	vRtrIsisIIHRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisIIHRecd.
helloRetransmitted	long	vRtrIsisIIHRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisIIHRetrans.
helloSent	long	vRtrIsisIIHSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisIIHSent.
lspDropped	long	vRtrIsisLSPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisLSPDrop.
lspReceived	long	vRtrIsisLSPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisLSPRecd.
lspRetransmitted	long	vRtrIsisLSPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisLSPRetrans.
lspSent	long	vRtrIsisLSPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisLSPSent.
psnpDropped	long	vRtrIsisPSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisPSNPDrop.
psnpReceived	long	vRtrIsisPSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisPSNPRecd.
psnpRetransmitted	long	vRtrIsisPSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisPSNPRetrans.
psnpSent	long	vRtrIsisPSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisPSNPSent.

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5620 SAM counter name	Type	MIB counter name	Description
unknownDropped	long	vRtrIsisUnknownDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisUnknownDrop.
unknownReceived	long	vRtrIsisUnknownRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisUnknownRecd.
unknownRetransmitted	long	vRtrIsisUnknownRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisUnknownRetrans.
unknownSent	long	vRtrIsisUnknownSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisUnknownSent.
SiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			
cspfDroppedRequests	long	vRtrIsisCSPFDroppedRequests	vRtrIsisCSPFDroppedRequests maintains the number of dropped CSPF requests by the protocol.
cspfPathsFound	long	vRtrIsisCSPFPathsFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which paths satisfying the constraints were found.
cspfPathsNotFound	long	vRtrIsisCSPFPathsNotFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which no paths satisfying the constraints were found.
cspfRequests	long	vRtrIsisCSPFRequests	vRtrIsisCSPFRequests maintains the number of CSPF requests made to the protocol.
initiatedPurges	long	vRtrIsisInitiatedPurges	The value of vRtrIsisInitiatedPurges counts the number of times purges have been initiated.
lspRegenerations	long	vRtrIsisLSPRegenerations	The value of vRtrIsisLSPRegenerations maintains the count of LSP regenerations.
spfRuns	long	vRtrIsisSpfRuns	The value of vRtrIsisSpfRuns specifies the number of times shortest path first calculations have been made.

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Table B-6 l2fwd statistics

5620 SAM counter name	Type	MIB counter name	Description
AccessInterfaceStpStats MIB table name: TIMETRA-SERV-MIB.sapTlsInfoTable Monitored class: l2fwd.AccessInterfaceStp			

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5620 SAM counter name	Type	MIB counter name	Description
forwardTransitions	long	sapTlsStpForwardTransitions	The value of the object sapTlsStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.
inBadBpdus	long	sapTlsStpInBadBpdus	This object specifies the number of bad BPDUs received on this SAP.
inConfigBpdus	long	sapTlsStpInConfigBpdus	The value of the object sapTlsStpInConfigBpdus indicates the number of Configuration BPDUs received on this SAP.
inRapidSpanningTreeBpdus	long	sapTlsStpInRstBpdus	The value of the object sapTlsStpInRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs received on this SAP.
inTcnBpdus	long	sapTlsStpInTcnBpdus	The value of the object sapTlsStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this SAP.
outConfigBpdus	long	sapTlsStpOutConfigBpdus	The value of the object sapTlsStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this SAP.
outRapidSpanningTreeBpdus	long	sapTlsStpOutRstBpdus	The value of the object sapTlsStpOutRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs sent out on this SAP.
outTcnBpdus	long	sapTlsStpOutTcnBpdus	This object specifies the number of Topology Change Notification BPDUs sent out this SAP.
CircuitStpStats MIB table name: TIMETRA-SERV-MIB.sdpBindTlsTable Monitored class: l2fwd.CircuitStp			
forwardTransitions	long	sdpBindTlsStpForwardTransitions	The value of the object sdpBindTlsStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.
inBadBpdus	long	sdpBindTlsStpInBadBpdus	The value of the object sdpBindTlsStpInBadBpdus indicates the number of bad BPDUs received on this SDP Bind.
inConfigBpdus	long	sdpBindTlsStpInConfigBpdus	The value of the object sdpBindTlsStpInConfigBpdus indicates the number of Configuration BPDUs received on this SDP Bind.
inRapidSpanningTreeBpdus	long	sdpBindTlsStpInRstBpdus	The value of the object sdpBindTlsStpInRstBpdus indicates the number of Rapid Spanning Tree (Rst) BPDUs received on this SDP.
inTcnBpdus	long	sdpBindTlsStpInTcnBpdus	The value of the object sdpBindTlsStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
outConfigBpdus	long	sdpBindTlsStpOutConfigBpdus	The value of the object sdpBindTlsStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this SDP Bind.
outRapidSpanningTreeBpdus	long	sdpBindTlsStpOutRstBpdus	The value of the object sdpBindTlsStpOutRstBpdus indicates the number of Rapid Spanning Tree (Rstp) BPDUs sent out on this SDP.
outTcnBpdus	long	sdpBindTlsStpOutTcnBpdus	The value of the object sdpBindTlsStpOutTcnBpdus indicates the number of Topology Change Notification BPDUs sent out this SDP Bind.
SiteFibStats MIB table name: TIMETRA-SERV-MIB.svcTlsInfoTable Monitored class: l2fwd.SiteFib			
entries	long	svcTlsFdbNumEntries	The value of the object svcTlsFdbNumEntries indicates the current number of entries in the FDB of this service.
provisionedSize	long	svcTlsFdbTableSize	The value of the object svcTlsFdbTableSize specifies the maximum number of learned and static entries allowed in the FDB of this service. When the value of TIMETRA-CHASSIS-MIB::tmnxChassisOperMode is not 'c', the maximum value of svcTlsFdbTableSize is '131071'. DEFVAL { 250 }.
staticEntries	long	svcTlsFdbNumStaticEntries	The value of the object svcTlsFdbNumStaticEntries indicates the current number of static entries in the FDB of this service.
SiteStpStats MIB table name: TIMETRA-SERV-MIB.svcTlsInfoTable Monitored class: l2fwd.SiteStp			
timeSinceTopologyChange	long	svcTlsStpTimeSinceTopologyChange	The value of the object svcTlsStpTimeSinceTopologyChange indicates the time (in hundredths of a second) since the last time a topology change was detected by the Spanning Tree Protocol instance associated with this service.
topologyChanges	long	svcTlsStpTopologyChanges	The value of the object svcTlsStpTopologyChanges indicates the total number of topology changes detected by the Spanning Tree Protocol instance associated with this service since the management entity was last reset or initialized.

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Table B-7 lag statistics

5620 SAM counter name	Type	MIB counter name	Description
LagStats MIB table name: TIMETRA-LAG-MIB.tLagOperationTable Monitored class: lag.Interface			
portThresholdFalling	long	tLagPortThresholdFalling	counts the number of linkDown or dynamicCost events for the Link Aggregation Group caused by the number of physical ports being less than or equal to tLagPortThreshold value.
portThresholdRising	long	tLagPortThresholdRising	counts the number of linkUp or dynamicCost events for the Link Aggregation Group caused by the number of physical ports being greater than tLagPortThreshold value.

Table B-8 ldp statistics

5620 SAM counter name	Type	MIB counter name	Description
SessionStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpSessionStatsTable Monitored class: ldp.Session			
addressMessagesReceived	long	vRtrLdpSessStatsAddrIn	The value of vRtrLdpSessStatsAddrIn counts the number of Address Messages that have been received during this session.
addressMessagesSent	long	vRtrLdpSessStatsAddrOut	The value of vRtrLdpSessStatsAddrOut counts the number of Address Messages that have been sent during this session.
addressWithdrawMessagesReceived	long	vRtrLdpSessStatsAddrWithdrawIn	The value of vRtrLdpSessStatsAddrWithdrawIn counts the number of Address Withdraw Messages that have been received during this session.
addressWithdrawMessagesSent	long	vRtrLdpSessStatsAddrWithdrawOut	The value of vRtrLdpSessStatsAddrWithdrawOut counts the number of Address Withdraw Messages that have been sent during this session.
fecReceived	long	vRtrLdpSessStatsFECRecv	The value of vRtrLdpSessStatsFECRecv counts the number of FECs received for this session.
fecSent	long	vRtrLdpSessStatsFECSent	The value of vRtrLdpSessStatsFECSent counts the number of FECs sent for this session.
helloMessagesReceived	long	vRtrLdpSessStatsHelloIn	The value of vRtrLdpSessStatsHelloIn counts the number of Hello Messages that have been received during this session.

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5620 SAM counter name	Type	MIB counter name	Description
helloMessagesSent	long	vRtrLdpSessStatsHelloOut	The value of vRtrLdpSessStatsHelloOut counts the number of Hello Messages that have been sent during this session.
initMessagesReceived	long	vRtrLdpSessStatsInitIn	The value of vRtrLdpSessStatsInitIn counts the number of Init Messages that have been received during this session.
initMessagesSent	long	vRtrLdpSessStatsInitOut	The value of vRtrLdpSessStatsInitOut counts the number of Init Messages that have been sent during this session.
keepAliveMessagesReceived	long	vRtrLdpSessStatsKeepaliveIn	The value of vRtrLdpSessStatsKeepaliveIn counts the number of Keepalive Messages that have been received during this session.
keepAliveMessagesSent	long	vRtrLdpSessStatsKeepaliveOut	The value of vRtrLdpSessStatsKeepaliveOut counts the number of Keepalive Messages that have been sent during this session.
labelAbortsReceived	long	vRtrLdpSessStatsLabelAbortIn	The value of vRtrLdpSessStatsLabelAbortIn counts the number of Label Abort Messages that have been received during this session.
labelAbortsSent	long	vRtrLdpSessStatsLabelAbortOut	The value of vRtrLdpSessStatsLabelAbortOut counts the number of Label Abort Messages that have been sent during this session.
labelMappingsReceived	long	vRtrLdpSessStatsLabelMappingIn	The value of vRtrLdpSessStatsLabelMappingIn counts the number of Label Mapping Messages that have been received during this session.
labelMappingsSent	long	vRtrLdpSessStatsLabelMappingOut	The value of vRtrLdpSessStatsLabelMappingOut counts the number of Label Mapping Messages that have been sent during this session.
labelReleasesReceived	long	vRtrLdpSessStatsLabelReleaseIn	The value of vRtrLdpSessStatsLabelReleaseIn counts the number of Label Release Messages that have been received during this session.
labelReleasesSent	long	vRtrLdpSessStatsLabelReleaseOut	The value of vRtrLdpSessStatsLabelReleaseOut counts the number of Label Release Messages that have been sent during this session.
labelRequestsReceived	long	vRtrLdpSessStatsLabelRequestIn	The value of vRtrLdpSessStatsLabelRequestIn counts the number of Label Request Messages that have been received during this session.
labelRequestsSent	long	vRtrLdpSessStatsLabelRequestOut	The value of vRtrLdpSessStatsLabelRequestOut counts the number of Label Request Messages that have been sent during this session.

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5620 SAM counter name	Type	MIB counter name	Description
labelWithdrawsReceived	long	vRtrLdpSessStatsLabelWithdrawIn	The value of vRtrLdpSessStatsLabelWithdrawIn counts the number of Label Withdraw Messages that have been received during this session.
labelWithdrawsSent	long	vRtrLdpSessStatsLabelWithdrawOut	The value of vRtrLdpSessStatsLabelWithdrawOut counts the number of Label Withdraw Messages that have been sent during this session.
linkAdjacencies	long	vRtrLdpSessStatsLinkAdj	The value of vRtrLdpSessStatsLinkAdj specifies the number of link adjacencies for this session.
notificationMessagesReceived	long	vRtrLdpSessStatsNotificationIn	The value of vRtrLdpSessStatsNotificationIn counts the number of Notification Messages that have been received during this session.
notificationMessagesSent	long	vRtrLdpSessStatsNotificationOut	The value of vRtrLdpSessStatsNotificationOut counts the number of Notification Messages that have been sent during this session.
targetedAdjacencies	long	vRtrLdpSessStatsTargAdj	The value of vRtrLdpSessStatsTargAdj specifies the number of targeted adjacencies for this session.
SiteStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpStatsTable Monitored class: ldp.Site			
activeAdjacencies	long	vRtrLdpStatsActiveAdjacencies	The value of vRtrLdpStatsActiveAdjacencies specifies the number of active adjacencies (i.e. established sessions) associated with the LDP instance.
activeInterfaces	long	vRtrLdpStatsActiveInterfaces	The value of vRtrLdpStatsActiveInterfaces specifies the number of active (i.e. operationally up) interfaces associated with the LDP instance.
activeSessions	long	vRtrLdpStatsActiveSessions	The value of vRtrLdpStatsActiveSessions specifies the number of active sessions (i.e. session in some form of creation) associated with the LDP instance.
activeTargetedSessions	long	vRtrLdpStatsActiveTargSessions	The value of vRtrLdpStatsActiveTargSessions specifies the number of active (i.e. operationally up) targeted sessions associated with the LDP instance.
addressFECsReceived	long	vRtrLdpStatsAddrFECRecv	The value of vRtrLdpStatsAddrFECRecv specifies the number of Address FECs received by the LDP instance from its neighbors.
addressFECsSent	long	vRtrLdpStatsAddrFECSent	The value of vRtrLdpStatsAddrFECSent specifies the number of Address FECs sent by the LDP instance to its neighbors.

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5620 SAM counter name	Type	MIB counter name	Description
attemptedSessions	long	vRtrLdpStatsAttemptedSessions	The value of vRtrLdpStatsAttemptedSessions specifies the total number of attempted sessions for this LDP instance.
badLdpIdentifierErrors	long	vRtrLdpStatsBadLdpIdentifierErrors	The value of vRtrLdpStatsBadLdpIdentifierErrors gives the number of Bad LDP Identifier Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badMessageLengthErrors	long	vRtrLdpStatsBadMessageLengthErrors	The value of vRtrLdpStatsBadMessageLengthErrors gives the number of Bad Message Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badPduLengthErrors	long	vRtrLdpStatsBadPduLengthErrors	The value of vRtrLdpStatsBadPduLengthErrors gives the number of Bad Pdu Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badTlvLengthErrors	long	vRtrLdpStatsBadTlvLengthErrors	The value of vRtrLdpStatsBadTlvLengthErrors gives the number of Bad TLV Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
inactiveInterfaces	long	vRtrLdpStatsInactiveInterfaces	The value of vRtrLdpStatsInactiveInterfaces specifies the number of inactive (i.e. operationally down) interfaces associated with the LDP instance.
inactiveTargetedSessions	long	vRtrLdpStatsInactiveTargSessions	The value of vRtrLdpStatsInactiveTargSessions specifies the number of inactive (i.e. operationally down) targeted sessions associated with the LDP instance.
keepAliveExpiredErrors	long	vRtrLdpStatsKeepAliveExpiredErrors	The value of vRtrLdpStatsKeepAliveExpiredErrors gives the number of Session Keep Alive Timer Expired Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
malformedTlvValueErrors	long	vRtrLdpStatsMalformedTlvValueErrors	The value of vRtrLdpStatsMalformedTlvValueErrors gives the number of Malformed TLV Value Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
operDownEvents	long	vRtrLdpStatsOperDownEvents	The value of vRtrLdpStatsOperDownEvents specifies the number of times the LDP instance has gone operationally down since the instance was created.

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5620 SAM counter name	Type	MIB counter name	Description
serviceFECsReceived	long	vRtrLdpStatsSvcFECRecv	The value of vRtrLdpStatsSvcFECRecv specifies the number of Service FECs received by the LDP instance from its neighbors.
serviceFECsSent	long	vRtrLdpStatsSvcFECSent	The value of vRtrLdpStatsSvcFECSent specifies the number of Service FECs sent by the LDP instance to its neighbors.
sessionRejectedAdvertisementModeErrors	long	vRtrLdpStatsSessRejAdvErrors	The value of vRtrLdpStatsSessRejAdvErrors gives the total number of Session Rejected/Parameters Advertisement Mode Error Notification Messages sent or received by this LDP instance.
sessionRejectedLabelRangeErrors	long	vRtrLdpStatsSessRejLabelRangeErrors	The value of vRtrLdpStatsSessRejLabelRangeErrors gives the total number of Session Rejected/Parameters Label Range Error Notification Messages sent or received by this LDP instance.
sessionRejectedMaxPduLengthErrors	long	vRtrLdpStatsSessRejMaxPduErrors	The value of vRtrLdpStatsSessRejMaxPduErrors gives the total number of Session Rejected/Parameters Max Pdu Length Error Notification Messages sent or received by this LDP instance.
sessionRejectedNoHelloErrors	long	vRtrLdpStatsSessRejNoHelloErrors	The value of vRtrLdpStatsSessRejNoHelloErrors gives the total number of Session Rejected/No Hello Error Notification Messages sent or received by this LDP instance.
shutdownNotificationsReceived	long	vRtrLdpStatsShutdownNotifRecv	The value of vRtrLdpStatsShutdownNotifRecv gives the number of Shutdown Notfications received related to sessions associated with this LDP instance.
shutdownNotificationsSent	long	vRtrLdpStatsShutdownNotifSent	The value of vRtrLdpStatsShutdownNotifSent gives the number of Shutdown Notfications sent related to sessions associated with this LDP instance.
TargetedPeerStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpIfStatsTable Monitored class: ldp.TargetedPeer			
existingAdjacencies	long	vRtrLdpIfExistingAdjacencies	The value of vRtrLdpIfExistingAdjacencies gives a count of the total active adjacencies on this LDP interface or with this targeted peer.

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Table B-9 mpls statistics

5620 SAM counter name	Type	MIB counter name	Description
DynamicLspStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatTable Monitored class: mpls.DynamicLsp			
configuredPaths	long	vRtrMplsLspConfiguredPaths	The number of paths configured for this LSP.
operationalPaths	long	vRtrMplsLspOperationalPaths	The number of operational paths for this LSP. This includes the path currently active, as well as operational standby paths.
pathChanges	long	vRtrMplsLspPathChanges	The number of path changes this LSP has had. For every path change (path down, path up, path change), a corresponding syslog/trap (if enabled) is generated for it.
standbyPaths	long	vRtrMplsLspStandbyPaths	The number of standby paths configured for this LSP.
timeSinceLastPathChange	long	vRtrMplsLspLastPathChange	The time in 10-millisecond units since the last change occurred on this LSP.
timeSinceLastPrimaryUpState	long	vRtrMplsLspPrimaryTimeUp	The total time in 10-millisecond units that this LSP's primary path has been operational. For example, the percentage contribution of the primary path to the operational time is given by (mplsLspPrimaryTimeUp/mplsLspTimeUp * 100) .
LspPathStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspPathStatTable Monitored class: mpls.LspPath			
cspfQueries	long	vRtrMplsLspPathCspfQueries	The value of vRtrMplsLspPathCspfQueries specifies the number of CSPF queries that have been made for this LSP path.
retryAttempts	long	vRtrMplsLspPathRetryAttempts	The number of unsuccessful attempts which have been made to signal this path. As soon as the path gets signalled, this is set to 0.
timeDown	long	vRtrMplsLspPathTimeDown	The total time in 10-millisecond units that this LSP Path has not been operational.
timeUp	long	vRtrMplsLspPathTimeUp	The total time in 10-millisecond units that this LSP path has been operational. For example, the percentage up time can be determined by computing (mplsLspPathTimeUp/mplsLspAge * 100).
transitionCount	long	vRtrMplsLspPathTransitionCount	The object vRtrMplsLspPathTransitionCount maintains the number of transitions that have occurred for this LSP.

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5620 SAM counter name	Type	MIB counter name	Description
LspStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatTable Monitored classes: • mpls.DynamicLsp • mpls.StaticLsp • mpls.BypassOnlyLsp			
age	long	vRtrMplsLspAge	The age (i.e., time from creation till now) of this LSP in 10-millisecond periods.
timeSinceLastDownState	long	vRtrMplsLspTimeDown	The total time in 10-millisecond units that this LSP has not been operational.
timeSinceLastTransition	long	vRtrMplsLspLastTransition	The time in 10-millisecond units since the last transition occurred on this LSP.
timeSinceLastUpState	long	vRtrMplsLspTimeUp	The total time in 10-millisecond units that this LSP has been been operational. For example, the percentage up time can be determined by computing (mplsLspTimeUp/mplsLspAge * 100).
transitions	long	vRtrMplsLspTransitions	The number of state transitions (up -> down and down -> up) this LSP has undergone.
MplsInterfaceStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsIfStatTable Monitored class: mpls.Interface			
receiveOctets	UINT128	vRtrMplsIfRxOctetCount	The total number of bytes in MPLS labeled packets received on this interface.
receivePackets	UINT128	vRtrMplsIfRxPktCount	The total number of MPLS labeled packets received on this interface.
transmitOctets	UINT128	vRtrMplsIfTxOctetCount	The total number of bytes in MPLS labeled packets transmitted on this interface.
transmitPackets	UINT128	vRtrMplsIfTxPktCount	The total number of MPLS labeled packets transmitted from this interface.
SiteStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsGeneralStatTable Monitored class: mpls.Site			
detourOriginate	long	vRtrMplsGeneralDetourLspOriginate	This object counts the number of detour LSPs that originate at this virtual router.
detourTerminate	long	vRtrMplsGeneralDetourLspTerminate	This object counts the number of detour LSPs that terminate at this virtual router.
detourTransit	long	vRtrMplsGeneralDetourLspTransit	This object counts the number of detour LSPs that transit through this virtual router.
dynamicOriginate	long	vRtrMplsGeneralDynamicLspOriginate	This object counts the number of dynamic LSPs that originate at this virtual router.
dynamicTerminate	long	vRtrMplsGeneralDynamicLspTerminate	This object counts the number of dynamic LSPs that terminate at this virtual router.
dynamicTransit	long	vRtrMplsGeneralDynamicLspTransit	This object counts the number of dynamic LSPs that transit through this virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
staticOriginate	long	vRtrMplsGeneralStaticLspOriginate	This object counts the number of static LSPs that originate at this virtual router.
staticTerminate	long	vRtrMplsGeneralStaticLspTerminate	This object counts the number of static LSPs that terminate at this virtual router.
staticTransit	long	vRtrMplsGeneralStaticLspTransit	This object counts the number of static LSPs that transit through this virtual router.

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Table B-10 ospf statistics

5620 SAM counter name	Type	MIB counter name	Description
AreaBasicStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfAreaTable Monitored class: ospf.AreaSite			
nssaTranslatorEvents	long	tmnxOspfAreaNssaTranslatorEvents	The value of tmnxOspfAreaNssaTranslatorEvents indicates the number of Translator State changes that have occurred since the last boot-up.
totalLSACount	long	tmnxOspfAreaScopeLsaCount	The value of tmnxOspfAreaScopeLsaCount indicates the total number of Area-Scope link state advertisements in this area's link-state database.
totalSpfRuns	long	tmnxOspfAreaSpfRuns	The value of tmnxOspfAreaSpfRuns indicates the number of times that the intra-area route table has been calculated using this area's link-state database. This is typically done using Dijkstra's algorithm.
totalUnknownLSACount	long	tmnxOspfAreaScopeUnkLsaCount	The value of tmnxOspfAreaScopeUnkLsaCount indicates the total number of unknown Area-Scope link-state advertisements in this area's link-state database.
InterfaceGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
events	long	tmnxOspfIfEvents	The value of tmnxOspfIfEvents indicates the number of times this OSPF interface has changed its state, or an error has occurred.
InterfaceReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF DataBase Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF DataBase Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
lsasWithBadChecksums	long	tmnxOspfIfRxBadChecksums	The value of tmnxOspfIfRxBadChecksums indicates the count of LSAs received with bad checksums.
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
authorizationFailures	long	tmnxOspfIfAuthFailures	The value of tmnxOspfIfAuthFailures indicates the total number of OSPF packets received with an invalid authorization key since tmnxOspfAdminState was last set to 'enabled'.
badAreas	long	tmnxOspfIfBadAreas	The value of tmnxOspfIfBadAreas indicates the total number of OSPF packets received with an area mismatch since tmnxOspfAdminState was last set to 'enabled'.
badAuthorizationTypes	long	tmnxOspfIfBadAuthTypes	The value of tmnxOspfIfBadAuthTypes indicates the total number of OSPF packets received with an invalid authorization type since tmnxOspfAdminState was last set to 'enabled'.
badDeadIntervals	long	tmnxOspfIfBadDeadIntervals	The value of tmnxOspfIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badDestinationAddresses	long	tmnxOspfIfBadDstAddrs	The value of tmnxOspfIfBadDstAddrs indicates the total number of OSPF packets received with the incorrect IP destination address since tmnxOspfAdminState was last set to 'enabled'.
badHelloIntervals	long	tmnxOspfIfBadHelloIntervals	The value of tmnxOspfIfBadHelloIntervals indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badLengths	long	tmnxOspfIfBadLengths	The value of tmnxOspfIfBadLengths indicates the total number of OSPF packets received on this interface with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badNeighbors	long	tmnxOspfIfBadNeighbors	The value of tmnxOspfIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the information this router has for the neighbor since tmnxOspfAdminState was last set to 'enabled'.
badNetworks	long	tmnxOspfIfBadNetworks	The value of tmnxOspfIfBadNetworks indicates the total number of OSPF packets received with invalid network or mask since tmnxOspfAdminState was last set to 'enabled'.
badOptions	long	tmnxOspfIfBadOptions	The value of tmnxOspfIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this interface or area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfIfBadPacketTypes	The value of tmnxOspfIfBadPacketTypes indicates the total number of OSPF packets received with an invalid OSPF packet type since tmnxOspfAdminState was last set to 'enabled'.
badVersions	long	tmnxOspfIfBadVersions	The value of tmnxOspfIfBadVersions indicates the total number of OSPF packets received with bad OSPF version numbers since tmnxOspfAdminState was last set to 'enabled'.
badVirtualLinks	long	tmnxOspfIfBadVirtualLinks	The value of tmnxOspfIfBadVirtualLinks indicates the total number of OSPF packets received on this interface that are destined to a virtual link that does not exist since tmnxOspfAdminState was last set to 'enabled'.
discardPackets	long	tmnxOspfIfDiscardPackets	The value of tmnxOspfIfDiscardPackets indicates the total number of OSPF packets discarded on this interface since tmnxOspfAdminState was last set to 'enabled'.
retransmitOuts	long	tmnxOspfIfRetransmitOuts	The value of tmnxOspfIfRetransmitOuts indicates the total number of OSPF Retransmits sent on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF DataBase Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF DataBase Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
NeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			
events	long	tmnxOspfNbrEvents	The value of tmnxOspfNbrEvents indicates the number of times this neighbor relationship has changed state, or an error has occurred.
retransmissionQueueLength	long	tmnxOspfNbrLsRetransQLen	The value of tmnxOspfNbrLsRetransQLen indicates the current length of the retransmission queue.
NeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			
badMtus	long	tmnxOspfNbrBadMTUs	The value of tmnxOspfNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.
badNeighborStates	long	tmnxOspfNbrBadNbrStates	The value of tmnxOspfNbrBadNbrStates indicates the total number of OSPF packets received when the neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfNbrBadPackets	The value of tmnxOspfNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfNbrBadSeqNums	The value of tmnxOspfNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
duplicates	long	tmnxOspfNbrDuplicates	The value of tmnxOspfNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfNbrLsaInstallFailed	The value of tmnxOspfNbrLsaInstallFailed indicates the total number of times an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfNbrLsaNotInLsdbs	The value of tmnxOspfNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
numberOfRestarts	long	tmnxOspfNbrNumRestarts	The value of tmnxOspfNbrNumRestarts indicates the number of times the neighbor has attempted restart.
optionMismatches	long	tmnxOspfNbrOptionMismatches	The value of tmnxOspfNbrOptionMismatches indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
SiteStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfStatisticsTable Monitored class: ospf.Site			
addRouteFailed	long	tmnxOspfRoutesAddsFailed	The value of tmnxOspfRoutesAddsFailed indicates the number of times an attempt to add a route to the Route Table Manager (RTM) failed for this OSPF instance.
cspfDroppedRequests	long	tmnxOspfCSPFDroppedRequests	The value of tmnxOspfCSPFDroppedRequests indicates the number of dropped CSPF requests made by the OSPF protocol.
cspfPathsFound	long	tmnxOspfCSPFPathsFound	The value of tmnxOspfCSPFPathsFound indicates the number of of paths found for the requests made to OSPF protocol.
cspfPathsNotFound	long	tmnxOspfCSPFPathsNotFound	The value of tmnxOspfCSPFPathsNotFound indicates the number of of paths not found for the requests made to OSPF protocol.
cspfRequests	long	tmnxOspfCSPFRequests	The value of tmnxOspfCSPFRequests indicates the number of CSPF requests made to the OSPF protocol.
deleteRouteFailed	long	tmnxOspfRoutesDelsFailed	The value of tmnxOspfRoutesDelsFailed indicates the number of times an attempt to delete a route from the Route Table Manager (RTM) failed for this instance of OSPF.
inOverflowCount	long	tmnxOspfNumTimesInOverflow	The value of tmnxOspfNumTimesInOverflow indicates the count of the number of times the system was in the overflow state.
inOverloadCount	long	tmnxOspfNumTimesInOverload	The value of tmnxOspfNumTimesInOverload indicates the count of the number of times the system was overloaded.
modifyRouteFailed	long	tmnxOspfRoutesModsFailed	The value of tmnxOspfRoutesModsFailed indicates the number of times an attempt to modify a route in the Route Table Manager (RTM) failed for this instance of OSPF.
newLsasOriginated	long	tmnxOspfOriginateNewLsas	The value of tmnxOspfOriginateNewLsas indicates the number of new link-state advertisements that have been originated. This number is incremented each time the router originates a new LSA.

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5620 SAM counter name	Type	MIB counter name	Description
newLsasReceived	long	tmnxOspfRxNewLsas	The value of tmnxOspfRxNewLsas indicates the number of link-state advertisements received determined to be new instantiations. This number does not include newer instantiations of self-originated link-state advertisements.
spfAttemptsFailed	long	tmnxOspfSpfAttemptsFailed	The value of tmnxOspfSpfAttemptsFailed indicates the number of times an attempt to run SPF has failed because SPF runs have been stopped as a result of insufficient memory resources.
VirtualLinkGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
events	long	tmnxOspfVirtIfEvents	The value of tmnxOspfVirtIfEvents indicates the number of state changes or error events on this Virtual Link.
VirtualLinkReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
databaseDescriptionPackets	long	tmnxOspfVirtIfRxDBDs	The value of tmnxOspfVirtIfRxDBDs indicates the total number of OSPF DataBase Description packets received on this virtual interface.
databaseDescriptionPackets	long	tmnxOspfVirtIfTxDBDs	The value of tmnxOspfVirtIfTxDBDs indicates the total number of OSPF DataBase Description packets transmitted on this virtual interface.
helloPackets	long	tmnxOspfVirtIfRxHellos	The value of tmnxOspfVirtIfRxHellos indicates the total number of OSPF Hello packets received on this virtual interface.
helloPackets	long	tmnxOspfVirtIfTxHellos	The value of tmnxOspfVirtIfTxHellos indicates the total number of OSPF Hello packets transmitted on this virtual interface since it was created.
linkStateAcknowledgements	long	tmnxOspfVirtIfRxLSAcks	The value of tmnxOspfVirtIfRxLSAcks indicates the total number of Link State Acknowledgements received on this virtual interface.
linkStateAcknowledgements	long	tmnxOspfVirtIfTxLSAcks	The value of tmnxOspfVirtIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfRxLSRs	The value of tmnxOspfVirtIfRxLSRs indicates the total number of OSPF Link State Requests (LSRs) received on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfTxLSRs	The value of tmnxOspfVirtIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this virtual interface.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateUpdates	long	tmnxOspfVirtIfRxLSUs	The value of tmnxOspfVirtIfRxLSUs indicates the total number of OSPF Link State Updates (LSUs) received on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfTxLSUs	The value of tmnxOspfVirtIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this virtual interface.
lsasWithBadChecksums	long	tmnxOspfVirtIfRxBadChecksums	The value of tmnxOspfVirtIfRxBadChecksums indicates the count of LSAs received with bad checksums.
totalPackets	long	tmnxOspfVirtIfRxPackets	The value of tmnxOspfVirtIfRxPackets indicates the total number of OSPF packets received on this virtual interface since it was created.
totalPackets	long	tmnxOspfVirtIfTxPackets	The value of tmnxOspfVirtIfTxPackets indicates the total number of OSPF packets transmitted on this virtual interface since it was created.
VirtualLinkStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
authorizationFailures	long	tmnxOspfVirtIfAuthFailures	The value of tmnxOspfVirtIfAuthFailures indicates the total number of OSPF packets received on this virtual interface with invalid authentication keys.
badAreas	long	tmnxOspfVirtIfBadAreas	The value of tmnxOspfVirtIfBadAreas indicates the total number of OSPF packets received on this virtual interface with area mismatches.
badAuthorizationTypes	long	tmnxOspfVirtIfBadAuthTypes	The value of tmnxOspfVirtIfBadAuthTypes indicates the total number of OSPF packets received on this virtual interface with invalid authentication types.
badDeadIntervals	long	tmnxOspfVirtIfBadDeadIntervals	The value of tmnxOspfVirtIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this virtual interface since tmnxOspfAdminState was last set to 'enabled'.
badDestinationAddresses	long	tmnxOspfVirtIfBadDstAddrs	The value of tmnxOspfVirtIfBadDstAddrs indicates the total number of OSPF packets received on this virtual interface with invalid destination IP address.
badHelloIntervals	long	tmnxOspfVirtIfBadHelloIntervls	The value of tmnxOspfVirtIfBadHelloIntervls indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this virtual interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badLengths	long	tmnxOspfVirtIfBadLengths	The value of tmnxOspfVirtIfBadLengths indicates the total number of OSPF packets received on this virtual interface with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.
badNeighbors	long	tmnxOspfVirtIfBadNeighbors	The value of tmnxOspfVirtIfBadNeighborsthe indicates the total number of OSPF packets received where the neighbor information does not match the configuration this router has for the neighbor.
badNetworks	long	tmnxOspfVirtIfBadNetworks	The value of tmnxOspfVirtIfBadNetworks indicates the total number of OSPF packets received on this virtual interface with invalid network or mask fields.
badOptions	long	tmnxOspfVirtIfBadOptions	The value of tmnxOspfVirtIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this virtual interface or transit-area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfVirtIfBadPacketTypes	The value of tmnxOspfVirtIfBadPacketTypes indicates the total number of OSPF packets received on this virtual interface with invalid OSPF packet types.
badVersions	long	tmnxOspfVirtIfBadVersions	The value oftmnxOspfVirtIfBadVersions indicates the total number of OSPF packets received on this virtual interface with invalid OSPF version numbers.
discardPackets	long	tmnxOspfVirtIfDiscardPackets	The value of tmnxOspfVirtIfDiscardPackets indicates the total number of OSPF packets discarded on this virtual interface.
retransmitOuts	long	tmnxOspfVirtIfRetransmitOuts	The value of tmnxOspfVirtIfRetransmitOuts indicates the total number of OSPF packets retransmitted on this virtual interface.
VirtualLinkTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
databaseDescriptionPackets	long	tmnxOspfVirtIfRxDBDs	The value of tmnxOspfVirtIfRxDBDs indicates the total number of OSPF DataBase Description packets received on this virtual interface.
databaseDescriptionPackets	long	tmnxOspfVirtIfTxDBDs	The value of tmnxOspfVirtIfTxDBDs indicates the total number of OSPF DataBase Description packets transmitted on this virtual interface.
helloPackets	long	tmnxOspfVirtIfRxHellos	The value of tmnxOspfVirtIfRxHellos indicates the total number of OSPF Hello packets received on this virtual interface.

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5620 SAM counter name	Type	MIB counter name	Description
helloPackets	long	tmnxOspfVirtIfTxHellos	The value of tmnxOspfVirtIfTxHellos indicates the total number of OSPF Hello packets transmitted on this virtual interface since it was created.
linkStateAcknowledgements	long	tmnxOspfVirtIfRxLSAcks	The value of tmnxOspfVirtIfRxLSAcks indicates the total number of Link State Acknowledgements received on this virtual interface.
linkStateAcknowledgements	long	tmnxOspfVirtIfTxLSAcks	The value of tmnxOspfVirtIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfRxLSRs	The value of tmnxOspfVirtIfRxLSRs indicates the total number of OSPF Link State Requests (LSRs) received on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfTxLSRs	The value of tmnxOspfVirtIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfRxLSUs	The value of tmnxOspfVirtIfRxLSUs indicates the total number of OSPF Link State Updates (LSUs) received on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfTxLSUs	The value of tmnxOspfVirtIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this virtual interface.
totalPackets	long	tmnxOspfVirtIfRxPackets	The value of tmnxOspfVirtIfRxPackets indicates the total number of OSPF packets received on this virtual interface since it was created.
totalPackets	long	tmnxOspfVirtIfTxPackets	The value of tmnxOspfVirtIfTxPackets indicates the total number of OSPF packets transmitted on this virtual interface since it was created.
VirtualNeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtNbrStatsTable Monitored class: ospf.VirtualNeighbor			
events	long	tmnxOspfVirtNbrEvents	The value of tmnxOspfVirtNbrEvents indicates the number of times this virtual link has changed its state, or an error has occurred.
retransmissionQueueLength	long	tmnxOspfVirtNbrLsRetransQLen	The value of tmnxOspfVirtNbrLsRetransQLen indicates the current length of the retransmission queue.
VirtualNeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtNbrStatsTable Monitored class: ospf.VirtualNeighbor			

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5620 SAM counter name	Type	MIB counter name	Description
badMtus	long	tmnxOspfVirtNbrBadMTUs	The value of tmnxOspfVirtNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfVirtNbrBadPackets	The value of tmnxOspfVirtNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfVirtNbrBadSeqNums	The value of tmnxOspfVirtNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
badVirtualNeighborStates	long	tmnxOspfVirtNbrBadNbrStates	The value of tmnxOspfVirtNbrBadNbrStates indicates the total number of OSPF packets received when the virtual neighbor state was not expecting to receive this packet type since tmnxOspfAdminStat was last set to 'enabled'.
duplicates	long	tmnxOspfVirtNbrDuplicates	The value of tmnxOspfVirtNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfVirtNbrLsaInstallFail	The value of tmnxOspfVirtNbrLsaInstallFail indicates the total number of times when an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfVirtNbrLsaNotInLsdbs	The value of tmnxOspfVirtNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.
numberOfRestarts	long	tmnxOspfVirtNbrNumRestarts	The value of tmnxOspfVirtNbrNumRestarts indicates the number of times the virtual neighbor has attempted restart since tmnxOspfAdminState was last set to 'enabled'.
optionMismatches	long	tmnxOspfVirtNbrOptionMismatch	The value of tmnxOspfVirtNbrOptionMismatch indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.

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Table B-11 pae802_1x statistics

5620 SAM counter name	Type	MIB counter name	Description
PaePortAuthenticatorDiagStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthDiagTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthAuthEapLogoffWhileAuthenticated	long	dot1xAuthAuthEapLogoffWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to DISCONNECTED, as a result of an EAPOL-Logoff message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.12.
dot1xAuthAuthEapLogoffWhileAuthenticating	long	dot1xAuthAuthEapLogoffWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of an EAPOL-Logoff message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.9.
dot1xAuthAuthEapStartsWhileAuthenticated	long	dot1xAuthAuthEapStartsWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to CONNECTING, as a result of an EAPOL-Start message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.11.
dot1xAuthAuthEapStartsWhileAuthenticating	long	dot1xAuthAuthEapStartsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of an EAPOL-Start message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.8.
dot1xAuthAuthFailWhileAuthenticating	long	dot1xAuthAuthFailWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to HELD, as a result of the Backend Authentication state machine indicating authentication failure (authFail = TRUE). REFERENCE 9.4.2, 8.5.4.2.6.
dot1xAuthAuthReauthsWhileAuthenticated	long	dot1xAuthAuthReauthsWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to CONNECTING, as a result of a reauthentication request (reAuthenticate = TRUE). REFERENCE 9.4.2, 8.5.4.2.10.
dot1xAuthAuthReauthsWhileAuthenticating	long	dot1xAuthAuthReauthsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of a reauthentication request (reAuthenticate = TRUE). REFERENCE 9.4.2, 8.5.4.2.7.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthAuthSuccessWhileAuthenticating	long	dot1xAuthAuthSuccessWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to AUTHENTICATED, as a result of the Backend Authentication state machine indicating successful authentication of the Supplicant (authSuccess = TRUE). REFERENCE 9.4.2, 8.5.4.2.4.
dot1xAuthAuthTimeoutsWhileAuthenticating	long	dot1xAuthAuthTimeoutsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of the Backend Authentication state machine indicating authentication timeout (authTimeout = TRUE). REFERENCE 9.4.2, 8.5.4.2.5.
dot1xAuthBackendAccessChallenges	long	dot1xAuthBackendAccessChallenges	Counts the number of times that the state machine receives an initial Access-Challenge packet from the Authentication server (i.e., aReq becomes TRUE, causing exit from the RESPONSE state). Indicates that the Authentication Server has communication with the Authenticator. REFERENCE 9.4.2, 8.5.6.2.2.
dot1xAuthBackendAuthFails	long	dot1xAuthBackendAuthFails	Counts the number of times that the state machine receives an EAP-Failure message from the Authentication Server (i.e., aFail becomes TRUE, causing a transition from RESPONSE to FAIL). Indicates that the Supplicant has not authenticated to the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.6.
dot1xAuthBackendAuthSuccesses	long	dot1xAuthBackendAuthSuccesses	Counts the number of times that the state machine receives an EAP-Success message from the Authentication Server (i.e., aSuccess becomes TRUE, causing a transition from RESPONSE to SUCCESS). Indicates that the Supplicant has successfully authenticated to the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.5.
dot1xAuthBackendNonNakResponsesFromSupplicant	long	dot1xAuthBackendNonNakResponsesFromSupplicant	Counts the number of times that the state machine receives a response from the Supplicant to an initial EAP-Request, and the response is something other than EAP-NAK (i.e., rxResp becomes TRUE, causing the state machine to transition from REQUEST to RESPONSE, and the response is not an EAP-NAK). Indicates that the Supplicant can respond to the Authenticator's chosen EAP-method. REFERENCE 9.4.2, 8.5.6.2.4.
dot1xAuthBackendOtherRequestsToSupplicant	long	dot1xAuthBackendOtherRequestsToSupplicant	Counts the number of times that the state machine sends an EAP-Request packet (other than an Identity, Notification, Failure or Success message) to the Supplicant (i.e., executes txReq on entry to the REQUEST state). Indicates that the Authenticator chose an EAP-method. REFERENCE 9.4.2, 8.5.6.2.3.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthBackendResponses	long	dot1xAuthBackendResponses	Counts the number of times that the state machine sends an initial Access-Request packet to the Authentication server (i.e., executes sendRespToServer on entry to the RESPONSE state). Indicates that the Authenticator attempted communication with the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.1.
dot1xAuthEapLogoffsWhileConnecting	long	dot1xAuthEapLogoffsWhileConnecting	Counts the number of times that the state machine transitions from CONNECTING to DISCONNECTED as a result of receiving an EAPOL-Logoff message. REFERENCE 9.4.2, 8.5.4.2.2.
dot1xAuthEntersAuthenticating	long	dot1xAuthEntersAuthenticating	Counts the number of times that the state machine transitions from CONNECTING to AUTHENTICATING, as a result of an EAP-Response/Identity message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.3.
dot1xAuthEntersConnecting	long	dot1xAuthEntersConnecting	Counts the number of times that the state machine transitions to the CONNECTING state from any other state. REFERENCE 9.4.2, 8.5.4.2.1.
PaePortAuthenticatorSessionStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthSessionStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthSessionAuthenticMethod	int	dot1xAuthSessionAuthenticMethod	The authentication method used to establish the session. REFERENCE 9.4.4, Session Authentication Method.
dot1xAuthSessionFramesRx	long	dot1xAuthSessionFramesRx	The number of user data frames received on this Port during the session. REFERENCE 9.4.4, Session Frames Received.
dot1xAuthSessionFramesTx	long	dot1xAuthSessionFramesTx	The number of user data frames transmitted on this Port during the session. REFERENCE 9.4.4, Session Frames Transmitted.
dot1xAuthSessionOctetsRx	UINT128	dot1xAuthSessionOctetsRx	The number of octets received in user data frames on this Port during the session. REFERENCE 9.4.4, Session Octets Received.
dot1xAuthSessionOctetsTx	UINT128	dot1xAuthSessionOctetsTx	The number of octets transmitted in user data frames on this Port during the session. REFERENCE 9.4.4, Session Octets Transmitted.
dot1xAuthSessionTerminateCause	int	dot1xAuthSessionTerminateCause	The reason for the session termination. REFERENCE 9.4.4, Session Terminate Cause.
dot1xAuthSessionTime	long	dot1xAuthSessionTime	The duration of the session in seconds. REFERENCE 9.4.4, Session Time.

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5620 SAM counter name	Type	MIB counter name	Description
PaePortAuthenticatorStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthEapLengthErrorFramesRx	long	dot1xAuthEapLengthErrorFramesRx	The number of EAPOL frames that have been received by this Authenticator in which the Packet Body Length field is invalid. REFERENCE 9.4.2, EAP length error frames received.
dot1xAuthEapolFramesRx	long	dot1xAuthEapolFramesRx	The number of valid EAPOL frames of any type that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL frames received.
dot1xAuthEapolFramesTx	long	dot1xAuthEapolFramesTx	The number of EAPOL frames of any type that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL frames transmitted.
dot1xAuthEapolLogoffFramesRx	long	dot1xAuthEapolLogoffFramesRx	The number of EAPOL Logoff frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Logoff frames received.
dot1xAuthEapolReqFramesTx	long	dot1xAuthEapolReqFramesTx	The number of EAP Request frames (other than Rq/Id frames) that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL Request frames transmitted.
dot1xAuthEapolReqIdFramesTx	long	dot1xAuthEapolReqIdFramesTx	The number of EAP Req/Id frames that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL Req/Id frames transmitted.
dot1xAuthEapolRespFramesRx	long	dot1xAuthEapolRespFramesRx	The number of valid EAP Response frames (other than Resp/Id frames) that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Response frames received.
dot1xAuthEapolRespIdFramesRx	long	dot1xAuthEapolRespIdFramesRx	The number of EAP Resp/Id frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Resp/Id frames received.
dot1xAuthEapolStartFramesRx	long	dot1xAuthEapolStartFramesRx	The number of EAPOL Start frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Start frames received.
dot1xAuthInvalidEapolFramesRx	long	dot1xAuthInvalidEapolFramesRx	The number of EAPOL frames that have been received by this Authenticator in which the frame type is not recognized. REFERENCE 9.4.2, Invalid EAPOL frames received.
dot1xAuthLastEapolFrameVersion	long	dot1xAuthLastEapolFrameVersion	The protocol version number carried in the most recently received EAPOL frame. REFERENCE 9.4.2, Last EAPOL frame version.

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Table B-12 rsvp statistics

5620 SAM counter name	Type	MIB counter name	Description
AuthenticationKeyStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.AuthenticationKey			
errorPacketsReceived	UINT128	vRtrRsvpIfStatRxAuthErrors	The total number of RSVP packets with MD5 errors received on this RSVP interface.
errorPacketsTransmitted	UINT128	vRtrRsvpIfStatTxAuthErrors	The total number of RSVP packets with MD5 errors sent by this RSVP interface.
RsvpInterfaceReceiveStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.Interface			
acks	UINT128	vRtrRsvpIfStatRxAcks	The total number of RSVP ACK messages received when refresh reduction is enabled on this RSVP interface.
acks	UINT128	vRtrRsvpIfStatTxAcks	The total number of RSVP ACK messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatRxBundles	The total number of RSVP bundled packets received on this RSVP interface. Bundled packets are sent when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatTxBundles	The total number of RSVP bundled packets that have been transmitted on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatRxErrorPkts	The total number of RSVP packets with errors received on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatTxErrorPkts	The total number of RSVP packets with errors that have been transmitted on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatRxHelloReqs	The total number of RSVP HELLO REQ messages received on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatTxHelloReqs	The total number of RSVP HELLO REQ packets that have been transmitted on this RSVP interface.
helloTimeout	long	vRtrRsvpIfStatHelloTimeout	The total number of hello messages that timed out on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatRxPkts	The total number of error free RSVP packets received on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatTxPkts	The total number of error free RSVP packets that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatRxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatTxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted from this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
paths	UINT128	vRtrRsvpIfStatRxPaths	The total number of RSVP PATH messages that have been received on this RSVP interface.
paths	UINT128	vRtrRsvpIfStatTxPaths	The total number of RSVP PATH messages that have been transmitted from this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatRxPathTears	The total number of RSVP PATH TEAR messages that have been received on this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatTxPathTears	The total number of RSVP PATH TEAR messages that have been transmitted from this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatRxSRefreshes	The total number of RSVP summary refresh, SREFRESH, messages received on this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatTxSRefreshes	The total number of summary refresh, SREFRESH, messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
reserveConfirms	UINT128	vRtrRsvpIfStatRxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been received on this RSVP interface.
reserveConfirms	UINT128	vRtrRsvpIfStatTxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been transmitted from this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatRxResvErrors	The total number of RSVP RESV ERROR messages that have been received on this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatTxResvErrors	The total number of RSVP RESV ERROR messages that have been transmitted from this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatRxResvs	The total number of RSVP RESV messages that have been received on this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatTxResvs	The total number of RSVP RESV messages that have been transmitted from this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatRxResvTears	The total number of RSVP RESV TEAR messages that have been received on this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatTxResvTears	The total number of RSVP RESV TEAR messages that have been transmitted from this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatRxTotalPkts	The total number of RSVP packets, including errors, received on this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatTxTotalPkts	The total number of RSVP packets, including error packets, that have been transmitted on this RSVP interface.
RsvpInterfaceStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfTable Monitored class: rsvp.Interface			

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5620 SAM counter name	Type	MIB counter name	Description
activeReservations	long	vRtrRsvpIfActiveReservationCount	The total number of active RSVP sessions that have reserved bandwidth.
activeSessions	long	vRtrRsvpIfActiveSessionCount	The total number of active RSVP sessions on this interface. This count includes sessions that have requested bandwidth as well as sessions that have not requested any bandwidth.
bandwidth	long	vRtrRsvpIfBandwidth	The value of vRtrRsvpIfBandwidth specifies the amount of bandwidth in mega-bits per second (Mbps) available to be reserved for the RSVP protocol on this interface. This is typically the (portSpeed * subscriptionPercentage).
reservedBandwidth	long	vRtrRsvpIfReservedBandwidth	The value of vRtrRsvpIfReservedBandwidth specifies the amount of bandwidth in mega-bits per second (Mbps) to reserved by the RSVP sessions on this interface. A value of zero (0) indicates that no bandwidth is reserved.
totalSessions	long	vRtrRsvpIfTotalSessionCount	The total number of RSVP sessions on this interface. This count includes sessions that are active as well as sessions that have been signalled but a response has not yet been received.
RsvpInterfaceTransmitStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.Interface			
acks	UINT128	vRtrRsvpIfStatRxAcks	The total number of RSVP ACK messages received when refresh reduction is enabled on this RSVP interface.
acks	UINT128	vRtrRsvpIfStatTxAcks	The total number of RSVP ACK messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatRxBundles	The total number of RSVP bundled packets received on this RSVP interface. Bundled packets are sent when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatTxBundles	The total number of RSVP bundled packets that have been transmitted on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatRxErrorPkts	The total number of RSVP packets with errors received on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatTxErrorPkts	The total number of RSVP packets with errors that have been transmitted on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatRxHelloReqs	The total number of RSVP HELLO REQ messages received on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatTxHelloReqs	The total number of RSVP HELLO REQ packets that have been transmitted on this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
packets	UINT128	vRtrRsvpIfStatRxPkts	The total number of error free RSVP packets received on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatTxPkts	The total number of error free RSVP packets that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatRxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatTxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted from this RSVP interface.
paths	UINT128	vRtrRsvpIfStatRxPaths	The total number of RSVP PATH messages that have been received on this RSVP interface.
paths	UINT128	vRtrRsvpIfStatTxPaths	The total number of RSVP PATH messages that have been transmitted from this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatRxPathTears	The total number of RSVP PATH TEAR messages that have been received on this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatTxPathTears	The total number of RSVP PATH TEAR messages that have been transmitted from this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatRxSRefreshes	The total number of RSVP summary refresh, SREFRESH, messages received on this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatTxSRefreshes	The total number of summary refresh, SREFRESH, messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
reserveConfirms	UINT128	vRtrRsvpIfStatRxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been received on this RSVP interface.
reserveConfirms	UINT128	vRtrRsvpIfStatTxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been transmitted from this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatRxResvErrors	The total number of RSVP RESV ERROR messages that have been received on this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatTxResvErrors	The total number of RSVP RESV ERROR messages that have been transmitted from this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatRxResvs	The total number of RSVP RESV messages that have been received on this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatTxResvs	The total number of RSVP RESV messages that have been transmitted from this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatRxResvTears	The total number of RSVP RESV TEAR messages that have been received on this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
reserveTears	UINT128	vRtrRsvpIfStatTxResvTears	The total number of RSVP RESV TEAR messages that have been transmitted from this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatRxTotalPkts	The total number of RSVP packets, including errors, received on this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatTxTotalPkts	The total number of RSVP packets, including error packets, that have been transmitted on this RSVP interface.
RsvpSessionStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpSessionStatTable Monitored class: rsvp.Session			
detourAge	long	vRtrRsvpSessionDetourAge	vRtrRsvpSessionDetourAge is the age (i.e., time from creation till now) of this detour LSP in 10-millisecond periods.
detourTimeUp	long	vRtrRsvpSessionDetourTimeUp	vRtrRsvpSessionDetourTimeUp is the total time in 10-millisecond units that the detour LSP has been operational.
pathsReceived	UINT128	vRtrRsvpSessionRxPaths	The total number of RSVP PATH messages received for this RSVP session.
pathsTransmitted	UINT128	vRtrRsvpSessionTxPaths	The total number of RSVP PATH messages transmitted for this RSVP session.
reservesReceived	UINT128	vRtrRsvpSessionRxResvs	The total number of RSVP RESV messages received for this RSVP session.
reservesTransmitted	UINT128	vRtrRsvpSessionTxResvs	The total number of RSVP RESV messages transmitted for this RSVP session.

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Table B-13 rtr statistics

5620 SAM counter name	Type	MIB counter name	Description
NetworkInterfaceIngressStats MIB table name: TIMETRA-SAS-VRTR-MIB.vRtrNetIfIngressStatsTable Monitored class: rtr.NetworkInterface			
ingressFwdInProfPkts	UINT128	vRtrNetIfIngressFwdInProfPkts	vRtrNetIfIngressFwdInProfPkts indicates the number of conforming network interface ingress packets forwarded on this router interface using this meter.
ingressFwdOutProfPkts	UINT128	vRtrNetIfIngressFwdOutProfPkts	vRtrNetIfIngressFwdOutProfPkts indicates the number of exceeding network interface ingress packets forwarded on this router interface using this meter.
ingressMeterIndex	long	vRtrNetIfIngressMeterIndex	vRtrNetIfIngressMeterIndex serves as the tertiary index. When used in conjunction with vRtrID and vRtrIfIndex, it uniquely identifies a network ingress meter for the specified router interface in the managed system.

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5620 SAM counter name	Type	MIB counter name	Description
RouteStats MIB table name: TIMETRA-VRTR-MIB.vRtrStatTable Monitored classes: • rtr.VirtualRouter • vprn.Site			
activeARPEntries	long	vRtrStatActiveARPEntries	vRtrStatActiveARPEntries indicates the number of active ARP entries for the specified virtual router in the system.
aggregateActiveRoutes	long	vRtrAggregateActiveRoutes	vRtrAggregateActiveRoutes indicates the current number of active aggregate routes for this instance of the route table.
aggregateRoutes	long	vRtrAggregateRoutes	vRtrAggregateRoutes indicates the current number of aggregate routes for this instance of the route table.
directActiveRoutes	long	vRtrDirectActiveRoutes	vRtrDirectActiveRoutes indicates the current number of active direct routes for this instance of the route table.
directRoutes	long	vRtrDirectRoutes	vRtrDirectRoutes indicates the current number of direct routes for this instance of the route table.
illegalLabelsReceived	long	vRtrStatIllegalLabels	vRtrStatIllegalLabels indicates the number of illegally received labels on this virtual router.
isisActiveRoutes	long	vRtrISISActiveRoutes	vRtrISISActiveRoutes indicates the current number of active isis routes for this instance of the route table.
isisRoutes	long	vRtrISISRoutes	vRtrISISRoutes indicates the current number of isis routes for this instance of the route table.
ldpActiveTunnels	long	vRtrStatActiveLdpTunnels	vRtrStatActiveLdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'ldp'.
ldpTunnels	long	vRtrStatTotalLdpTunnels	vRtrStatTotalLdpTunnels indicates the current number of both active and inactive LDP tunnels.
ospfActiveRoutes	long	vRtrOSPFActiveRoutes	vRtrOSPFActiveRoutes indicates the current number of active ospf routes for this instance of the route table.
ospfRoutes	long	vRtrOSPFRoutes	vRtrOSPFRoutes indicates the current number of ospf routes for this instance of the route table.
routerInterfacesActive	long	vRtrStatActiveIfs	vRtrStatActiveIfs indicates the current number of router interfaces with vRtrIfAdminState equal 'inService' on this virtual router.
routerInterfacesConfigured	long	vRtrStatConfiguredIfs	vRtrStatConfiguredIfs indicates the current number of router interfaces configured on this virtual router.
routesInVrf	long	vRtrStatCurrNumRoutes	vRtrStatCurrNumRoutes indicates the current number of routes in the VRF for this virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
sdpActiveTunnels	long	vRtrStatActiveSdpTunnels	vRtrStatActiveSdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'sdp'.
sdpTunnels	long	vRtrStatTotalSdpTunnels	vRtrStatTotalSdpTunnels indicates the current number of both active and inactive SDP tunnels.
staticActiveRoutes	long	vRtrStaticActiveRoutes	vRtrStaticActiveRoutes indicates the current number of active static routes for this instance of the route table.
staticRoutes	long	vRtrStaticRoutes	vRtrStaticRoutes indicates the current number of static routes for this instance of the route table.
totalARPEntries	long	vRtrStatTotalARPEntries	vRtrStatTotalARPEntries indicates the total number of active and inactive ARP entries for the specified virtual router in the system.

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Table B-14 service statistics

5620 SAM counter name	Type	MIB counter name	Description
ServiceSapIngQosPlcyStats MIB table name: TIMETRA-SAS-QOS-MIB.sapIngQosMeterStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedInProfOctets	UINT128	sapIngQosMeterStatsForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
forwardedInProfPackets	UINT128	sapIngQosMeterStatsForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
forwardedOutProfOctets	UINT128	sapIngQosMeterStatsForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
forwardedOutProfPackets	UINT128	sapIngQosMeterStatsForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
meterId	long	sapIngQosMeterId	The index of the ingress QoS meter of this SAP.

Table B-15 sitesec statistics

5620 SAM counter name	Type	MIB counter name	Description
CpmFilterQueueStats MIB table name: TIMETRA-SECURITY-MIB.tCpmFilterQueueStatsTable Monitored class: sitesec.CpmFilterQueue			
droppedInOctets	UINT128	tCpmFilterQInProfileDropOctets	The value of tCpmFilterQInProfileDropOctets indicates the number of octets complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedInPackets	UINT128	tCpmFilterQInProfileDropPkts	The value of tCpmFilterQInProfileDropPkts indicates the number of packets complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedOutOctets	UINT128	tCpmFilterQOutProfileDropOctets	The value of tCpmFilterQOutProfileDropOctets indicates the number of octets not complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedOutPackets	UINT128	tCpmFilterQOutProfileDropPkts	The value of tCpmFilterQOutProfileDropPkts indicates the number of packets not complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
forwardedInOctets	UINT128	tCpmFilterQInProfileFwdOctets	The value of tCpmFilterQInProfileFwdOctets indicates the number of octets complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedInPackets	UINT128	tCpmFilterQInProfileFwdPkts	The value of tCpmFilterQInProfileFwdPkts indicates the number of packets complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedOutOctets	UINT128	tCpmFilterQOutProfileFwdOctets	The value of tCpmFilterQOutProfileFwdOctets indicates the number of octets not complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedOutPackets	UINT128	tCpmFilterQOutProfileFwdPkts	The value of tCpmFilterQOutProfileFwdPkts indicates the number of packets not complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.

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5620 SAM counter name	Type	MIB counter name	Description
CpmIpFilterStats MIB table name: TIMETRA-SECURITY-MIB.tCpmIpFilterStatsTable Monitored class: sitesec.CpmIpFilterEntry			
droppedPackets	UINT128	tCpmIpFilterStatsDroppedPkts	The value of tCpmIpFilterStatsDroppedPkts indicates the number of packets dropped due to the tCpmIpFilterEntry with the same index.
forwardedPackets	UINT128	tCpmIpFilterStatsForwardedPkts	The value of tCpmIpFilterStatsForwardedPkts indicates the number of packets forwarded due to the tCpmIpFilterEntry with the same index.
MafEntryStats MIB table name: TIMETRA-SECURITY-MIB.tmnxMafMatchTable Monitored class: sitesec.MafEntry			
matchCount	UINT128	tmnxMafMatchCount	The value of tmnxMafMatchCount indicates the number of times a management packet has matched this filter entry.

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Table B-16 svt statistics

5620 SAM counter name	Type	MIB counter name	Description
MirrorSdpBindingStats MIB table name: TIMETRA-SERV-MIB.sdpBindBaseStatsTable Monitored class: svt.MirrorSdpBinding			
egressForwardedOctets	UINT128	sdpBindBaseStatsEgressForwardedOctets	.
egressForwardedPackets	UINT128	sdpBindBaseStatsEgressForwardedPackets	.
ingressDroppedOctets	UINT128	sdpBindBaseStatsIngDropOctets	.
ingressDroppedPackets	UINT128	sdpBindBaseStatsIngressDroppedPackets	.
ingressForwardedOctets	UINT128	sdpBindBaseStatsIngFwdOctets	.
ingressForwardedPackets	UINT128	sdpBindBaseStatsIngressForwardedPackets	.
SdpBindingBaseStats MIB table name: TIMETRA-SERV-MIB.sdpBindBaseStatsTable Monitored classes: • svt.SpokeSdpBinding • svt.MeshSdpBinding			
egressForwardedOctets	UINT128	sdpBindBaseStatsEgressForwardedOctets	.
egressForwardedPackets	UINT128	sdpBindBaseStatsEgressForwardedPackets	.

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5620 SAM counter name	Type	MIB counter name	Description
ingressDroppedOctets	UINT128	sdpBindBaseStatsIngDropOctets	.
ingressDroppedPackets	UINT128	sdpBindBaseStatsIngressDroppedPackets	.
ingressForwardedOctets	UINT128	sdpBindBaseStatsIngFwdOctets	.
ingressForwardedPackets	UINT128	sdpBindBaseStatsIngressForwardedPackets	.
TunnelKeepAliveStats MIB table name: TIMETRA-SERV-MIB.sdpInfoTable Monitored class: svt.Tunnel			
lateHelloResponses	long	sdpKeepAliveNumLateHelloResponseMessages	The number of SDP Echo Response messages received after the corresponding Request timeout timer expired.
receivedHelloMessages	long	sdpKeepAliveNumHelloResponseMessages	The number of SDP Echo Response messages received since the keep-alive was administratively enabled or the counter was cleared.
transmittedHelloMessages	long	sdpKeepAliveNumHelloRequestMessages	The number of SDP Echo Request messages transmitted since the keep-alive was administratively enabled or the counter was cleared.

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C. 7250 SAS Release 2.0 statistics counters

C.1 7250 SAS Release 2.0 statistics counters C-2

C.1 7250 SAS Release 2.0 statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for the 7250 SAS, Release 2.0. Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.



Note 1 — The tables list the 5620 SAM-supported statistics counters for the current release of the device. Counters that are supported for a previous device release, but not for the current release, are not listed.

Note 2 — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table C-1 lists each statistics package and the associated statistics-counter table.

Table C-1 Statistics packages and counter tables

Package name	See
equipment	Table C-2
ethernetequipment	Table C-3

Table C-2 equipment statistics

5620 SAM counter name	Type	MIB counter name	Description
BatmL2InterfaceStats MIB table name: BATM-SWITCH-MIB.reportsL2IfaceTable Monitored class: equipment.PhysicalPort			
broadcastPkts	long	reportsL2IfaceStatsBroadcastPkts	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets.

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5620 SAM counter name	Type	MIB counter name	Description
collisions	long	reportsL2IfaceStatsCollisions	The best estimate of the total number of collisions on this Ethernet segment. The value returned will depend on the RMON probe's location. Sections 8.2.1.3 (10BASE-5) and 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision in the receive mode if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. Section 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coaxial segments to which the repeater is connected.
cRCAlignErrors	long	reportsL2IfaceStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
dropEvents	long	reportsL2IfaceStatsDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
fragments	long	reportsL2IfaceStatsFragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that it is entirely normal for etherStatsFragments to increment. This is because it counts both runts (which are normal occurrences due to collisions) and noise hits.

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5620 SAM counter name	Type	MIB counter name	Description
jabbers	long	reportsL2IfaceStatsJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different from the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition in which any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
multicastPkts	long	reportsL2IfaceStatsMulticastPkts	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address.
octets	long	reportsL2IfaceStatsOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). This object can be used as a reasonable estimate of Ethernet utilization. If greater precision is desired, the etherStatsPkts and etherStatsOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (9.6 + 6.4) + (Octets * .8) Utilization = ---------- Interval * 10,000 The result of this equation is the Ethernet segment utilization which is the percent utilization of the ethernet segment on a 0 to 100 percent scale.
oversizePkts	long	reportsL2IfaceStatsOversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
pkts	long	reportsL2IfaceStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
pkts1024to1518Octets	long	reportsL2IfaceStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).
pkts128to255Octets	long	reportsL2IfaceStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
pkts256to511Octets	long	reportsL2IfaceStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
pkts512to1023Octets	long	reportsL2IfaceStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
pkts64Octets	long	reportsL2IfaceStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
pkts65to127Octets	long	reportsL2IfaceStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).
rXOctetsNoErr	long	reportsL2IfaceRXOctetsNoErr	The number of octets received on the interface. This number does not include octets with errors.
rXPacketsNoErr	long	reportsL2IfaceRXPacketsNoErr	The number of packets received on the interface. This number does not include packets with errors.
tXOctetsNoErr	long	reportsL2IfaceTXOctetsNoErr	The number of octets transmitted from the interface. This number does not include octets with errors.
tXPacketsNoErr	long	reportsL2IfaceTXPacketsNoErr	The number of packets transmitted from the interface. This number does not include packets with errors.
undersizePkts	long	reportsL2IfaceStatsUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.
InterfaceAdditionalStats MIB table name: IF-MIB.ifXTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
receivedBroadcastPackets	UINT128	ifHCInBroadcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of ifInBroadcastPkts.
receivedMulticastPackets	UINT128	ifHCInMulticastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifInMulticastPkts.

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5620 SAM counter name	Type	MIB counter name	Description
receivedTotalOctets	UINT128	ifHCInOctets	The total number of octets received on the interface, including framing characters. This object is a 64-bit version of ifInOctets.
receivedUnicastPackets	UINT128	ifHCInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of ifInUcastPkts.
transmittedBroadcastPackets	UINT128	ifHCOutBroadcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutBroadcastPkts.
transmittedMulticastPackets	UINT128	ifHCOutMulticastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifOutMulticastPkts.
transmittedTotalOctets	UINT128	ifHCOutOctets	The total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of ifOutOctets.
transmittedUnicastPackets	UINT128	ifHCOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutUcastPkts.
InterfaceStats MIB table name: RFC1213-MIB.ifTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
outboundBadPackets	long	ifOutErrors	The number of outbound packets that could not be transmitted because of errors.
outboundPacketsDiscarded	long	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space.
receivedBadPackets	long	ifInErrors	The number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol.

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5620 SAM counter name	Type	MIB counter name	Description
receivedOctets	long	ifInOctets	The total number of octets received on the interface, including framing characters.
receivedPacketsDiscarded	long	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space.
receivedUnicastPackets	long	ifInUcastPkts	The number of subnetwork-unicast packets delivered to a higher-layer protocol.
receivedUnknownProtocolPackets	long	ifInUnknownProtos	The number of packets received via the interface which were discarded because of an unknown or unsupported protocol.
transmittedOctets	long	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters.
transmittedUnicastPackets	long	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted to a subnetwork-unicast address, including those that were discarded or not sent.

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Table C-3 ethernetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
EthernetStats MIB table name: RMON-MIB.etherStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
broadcastPackets	long	etherStatsBroadcastPkts	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets.

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5620 SAM counter name	Type	MIB counter name	Description
collisions	long	etherStatsCollisions	The best estimate of the total number of collisions on this Ethernet segment. The value returned will depend on the location of the RMON probe. Section 8.2.1.3 (10BASE-5) and section 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision, in the receive mode, if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coax segments to which the repeater is connected.
crcAlignErrors	long	etherStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
dropEvents	long	etherStatsDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
fragments	long	etherStatsFragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that it is entirely normal for etherStatsFragments to increment. This is because it counts both runts (which are normal occurrences due to collisions) and noise hits.

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5620 SAM counter name	Type	MIB counter name	Description
jabbers	long	etherStatsJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different than the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition where any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
multicastPackets	long	etherStatsMulticastPkts	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address.
oversizePackets	long	etherStatsOversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
packets1024to1518Octets	long	etherStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).
packets128to255Octets	long	etherStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	long	etherStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	long	etherStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	long	etherStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	long	etherStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	long	etherStatsOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). This object can be used as a reasonable estimate of 10-Megabit ethernet utilization. If greater precision is desired, the etherStatsPkts and etherStatsOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (9.6 + 6.4) + (Octets * .8) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent.
totalPackets	long	etherStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
undersizePackets	long	etherStatsUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.

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D. 7250 SAS-ES and 7250 SAS-ESA Release 3.0 statistics counters

D.1 7250 SAS-ES and 7250 SAS-ESA Release 3.0 statistics counters *D-2*

D.1 7250 SAS-ES and 7250 SAS-ESA Release 3.0 statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for the 7250 SAS-ES and 7250 SAS-ESA, Release 3.0. Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.

Note 1 — The tables list the 5620 SAM-supported statistics counters for the current release of the device. Counters that are supported for a previous device release, but not for the current release, are not listed.

Note 2 — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table D-1 lists each statistics package and the associated statistics-counter table.

Table D-1 Statistics packages and counter tables

Package name	See
equipment	Table D-2
ethernetequipment	Table D-3

Table D-2 equipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AllocatedMemoryStats MIB table name: BATM-SYS-INFO-MIB.numBytesAlloc Monitored class: equipment.SystemStatsHolder			
allocatedMemory	long	numBytesAlloc	The number of bytes of system memory that have been allocated by tasks and system services.
AvailableMemoryStats MIB table name: BATM-SYS-INFO-MIB.numBytesFree Monitored class: equipment.SystemStatsHolder			
availableMemory	long	numBytesFree	The number of bytes free in the system memory.

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5620 SAM counter name	Type	MIB counter name	Description
BatmL2InterfaceStats MIB table name: BATM-SWITCH-MIB.reportsL2IfaceTable Monitored class: equipment.PhysicalPort			
broadcastPkts	long	reportsL2IfaceStatsBroadcastPkts	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets.
collisions	long	reportsL2IfaceStatsCollisions	The best estimate of the total number of collisions on this Ethernet segment. The value returned will depend on the RMON probe's location. Sections 8.2.1.3 (10BASE-5) and 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision in the receive mode if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. Section 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coaxial segments to which the repeater is connected.
cRCAlignErrors	long	reportsL2IfaceStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
dropEvents	long	reportsL2IfaceStatsDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.

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5620 SAM counter name	Type	MIB counter name	Description
fragments	long	reportsL2IfaceStatsFragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that it is entirely normal for etherStatsFragments to increment. This is because it counts both runts (which are normal occurrences due to collisions) and noise hits.
jabbers	long	reportsL2IfaceStatsJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different from the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition in which any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
multicastPkts	long	reportsL2IfaceStatsMulticastPkts	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address.
octets	long	reportsL2IfaceStatsOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). This object can be used as a reasonable estimate of Ethernet utilization. If greater precision is desired, the etherStatsPkts and etherStatsOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (9.6 + 6.4) + (Octets * .8) Utilization = ---------- Interval * 10,000 The result of this equation is the Ethernet segment utilization which is the percent utilization of the ethernet segment on a 0 to 100 percent scale.
oversizePkts	long	reportsL2IfaceStatsOversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
pkts	long	reportsL2IfaceStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.

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5620 SAM counter name	Type	MIB counter name	Description
pkts1024to1518Octets	long	reportsL2IfaceStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).
pkts128to255Octets	long	reportsL2IfaceStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
pkts256to511Octets	long	reportsL2IfaceStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
pkts512to1023Octets	long	reportsL2IfaceStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
pkts64Octets	long	reportsL2IfaceStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
pkts65to127Octets	long	reportsL2IfaceStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).
rXOctetsNoErr	long	reportsL2IfaceRXOctetsNoErr	The number of octets received on the interface. This number does not include octets with errors.
rXPacketsNoErr	long	reportsL2IfaceRXPacketsNoErr	The number of packets received on the interface. This number does not include packets with errors.
tXOctetsNoErr	long	reportsL2IfaceTXOctetsNoErr	The number of octets transmitted from the interface. This number does not include octets with errors.
tXPacketsNoErr	long	reportsL2IfaceTXPacketsNoErr	The number of packets transmitted from the interface. This number does not include packets with errors.
undersizePkts	long	reportsL2IfaceStatsUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.
InterfaceAdditionalStats MIB table name: IF-MIB.ifXTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			

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5620 SAM counter name	Type	MIB counter name	Description
receivedBroadcastPackets	UINT128	ifHCInBroadcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of ifInBroadcastPkts.
receivedMulticastPackets	UINT128	ifHCInMulticastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifInMulticastPkts.
receivedTotalOctets	UINT128	ifHCInOctets	The total number of octets received on the interface, including framing characters. This object is a 64-bit version of ifInOctets.
receivedUnicastPackets	UINT128	ifHCInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of ifInUcastPkts.
transmittedBroadcastPackets	UINT128	ifHCOutBroadcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutBroadcastPkts.
transmittedMulticastPackets	UINT128	ifHCOutMulticastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifOutMulticastPkts.
transmittedTotalOctets	UINT128	ifHCOutOctets	The total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of ifOutOctets.
transmittedUnicastPackets	UINT128	ifHCOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutUcastPkts.
InterfaceStats MIB table name: RFC1213-MIB.ifTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			

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5620 SAM counter name	Type	MIB counter name	Description
outboundBadPackets	long	ifOutErrors	The number of outbound packets that could not be transmitted because of errors.
outboundPacketsDiscarded	long	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space.
receivedBadPackets	long	ifInErrors	The number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol.
receivedOctets	long	ifInOctets	The total number of octets received on the interface, including framing characters.
receivedPacketsDiscarded	long	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space.
receivedUnicastPackets	long	ifInUcastPkts	The number of subnetwork-unicast packets delivered to a higher-layer protocol.
receivedUnknownProtocolPackets	long	ifInUnknownProtos	The number of packets received via the interface which were discarded because of an unknown or unsupported protocol.
transmittedOctets	long	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters.
transmittedUnicastPackets	long	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted to a subnetwork-unicast address, including those that were discarded or not sent.

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Table D-3 ethernetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
EthernetStats MIB table name: RMON-MIB.etherStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
broadcastPackets	long	etherStatsBroadcastPkts	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets.

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5620 SAM counter name	Type	MIB counter name	Description
collisions	long	etherStatsCollisions	The best estimate of the total number of collisions on this Ethernet segment. The value returned will depend on the location of the RMON probe. Section 8.2.1.3 (10BASE-5) and section 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision, in the receive mode, if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coax segments to which the repeater is connected.
crcAlignErrors	long	etherStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
dropEvents	long	etherStatsDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
fragments	long	etherStatsFragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that it is entirely normal for etherStatsFragments to increment. This is because it counts both runts (which are normal occurrences due to collisions) and noise hits.

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5620 SAM counter name	Type	MIB counter name	Description
jabbers	long	etherStatsJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different than the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition where any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
multicastPackets	long	etherStatsMulticastPkts	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address.
oversizePackets	long	etherStatsOversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
packets1024to1518Octets	long	etherStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).
packets128to255Octets	long	etherStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	long	etherStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	long	etherStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	long	etherStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	long	etherStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	long	etherStatsOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). This object can be used as a reasonable estimate of 10-Megabit ethernet utilization. If greater precision is desired, the etherStatsPkts and etherStatsOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (9.6 + 6.4) + (Octets * .8) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent.
totalPackets	long	etherStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
undersizePackets	long	etherStatsUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.

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E. 7450 ESS Release 7.0 statistics counters

E.1 7450 ESS Release 7.0 statistics counters E-2

E.1 7450 ESS Release 7.0 statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for the 7450 ESS, Release 7.0. Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.



Note 1 — The tables list the 5620 SAM-supported statistics counters for the current release of the device. Counters that are supported for a previous device release, but not for the current release, are not listed.

Note 2 — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table E-1 lists each statistics package and the associated statistics-counter table.

Table E-1 Statistics packages and counter tables

Package name	See
aapolicy	Table E-2
aclfilter	Table E-3
aps	Table E-4
bgp	Table E-5
equipment	Table E-6
ethernetequipment	Table E-7
fr	Table E-8
gsmp	Table E-9
isa	Table E-10
isis	Table E-11
l2fib	Table E-12
l2fwd	Table E-13
lag	Table E-14
ldp	Table E-15
lldp	Table E-16
mpls	Table E-17
multicast	Table E-18

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Package name	See
multichassis	Table E-19
ospf	Table E-20
pae802_1x	Table E-21
ppp	Table E-22
radiusaccounting	Table E-23
ressubscr	Table E-24
rip	Table E-25
rsvp	Table E-26
rtr	Table E-27
service	Table E-28
sitesec	Table E-29
sonetequipment	Table E-30
subscrauth	Table E-31
svq	Table E-32
svt	Table E-33
vpls	Table E-34
vrrp	Table E-35

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Table E-2 aapolicy statistics

5620 SAM counter name	Type	MIB counter name	Description
BsxAaAccountingStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaTable Monitored classes: • aapolicy.Application • aapolicy.ApplicationGroup • aapolicy.ApplicationAssuranceProtocol			
numOfSubscribers	long	tmnxBsxStatAaNumSubscribers	The value of tmnxBsxStatAaNumSubscribers indicates the number of subscribers at the most recent 5-minute snapshot of statistics.
BsxAppQosPolicyStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxAqpStatsTable Monitored class: aapolicy.AppQosPolicy			
conflicts	long	tmnxBsxAqpStatsConflicts	The value of tmnxBsxAqpStatsConflicts indicates the number of flows that have hit this AQP entry, but resulted in a conflict with the match criteria.

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5620 SAM counter name	Type	MIB counter name	Description
flows	long	tmnxBsxAqpStatsFlows	The value of tmnxBsxAqpStatsFlows indicates the number of flows that have hit this entry. In certain cases, a flow may change its attributes thus undergoing a second policy evaluation. In these cases, the flow may be counted against two different AQP entries.
BsxSapCustRecAppGrpStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubTable Monitored class: service.AccessInterface			
appGrpName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxSapStudyAppStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubSdyTable Monitored class: service.AccessInterface			
appName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.

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Table E-3 aclfilter statistics

5620 SAM counter name	Type	MIB counter name	Description
HitCountStats MIB table name: TIMETRA-FILTER-MIB.tIPFilterParamsTable Monitored class: aclfilter.IpFilterEntry			
egressHitByteCount	UINT128	tIPFilterParamsEgrHitByteCount	The value of tIPFilterParamsEgrHitByteCount indicates the number of bytes of all egress packets that matched this entry.
egressHitCount	UINT128	tIPFilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitByteCount	UINT128	tIPFilterParamsIngrHitByteCount	The value of tIPFilterParamsIngrHitByteCount indicates the number of bytes of all ingress packets that matched this entry.
ingressHitCount	UINT128	tIPFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.
MacHitCountStats MIB table name: TIMETRA-FILTER-MIB.tMacFilterParamsTable Monitored class: aclfilter.MacFilterEntry			

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5620 SAM counter name	Type	MIB counter name	Description
egressHitByteCount	UINT128	tMacFilterParamsEgrHitByteCount	The value of tMacFilterParamsEgrHitByteCount indicates the number of bytes of all egress packets that matched this entry.
egressHitCount	UINT128	tMacFilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitByteCount	UINT128	tMacFilterParamsIngrHitByteCount	The value of tMacFilterParamsIngrHitByteCount indicates the number of bytes of all ingress packets that matched this entry.
ingressHitCount	UINT128	tMacFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.

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Table E-4 aps statistics

5620 SAM counter name	Type	MIB counter name	Description
ApsChannelStats MIB table name: APS-MIB.apsChanStatusTable Monitored class: aps.ApsChannel			
discontinuityTime	long	apsChanStatusDiscontinuityTime	The value of sysUpTime on the most recent occasion at which any one or more of this channel's counters suffered a discontinuity. The relevant counters are the specific instances associated with this channel of any Counter32 object contained in apsChanStatusTable. If no such discontinuities have occurred since the last re-initialization of the local management subsystem, then this object contains a zero value.
lastSwitchover	long	apsChanStatusLastSwitchover	When queried with index value apsChanConfigNumber other than 0, this object will return the value of sysUpTime when this channel last completed a switch to the protection line. If this channel has never switched to the protection line, the value 0 will be returned. When queried with index value apsChanConfigNumber set to 0, which is the protection line, this object will return the value of sysUpTime the last time that a working channel was switched back to the working line from this protection line. If no working channel has ever switched back to the working line from this protection line, the value 0 will be returned.

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5620 SAM counter name	Type	MIB counter name	Description
signalDegrades	long	apsChanStatusSignalDegrades	A count of Signal Degrade conditions. This condition occurs when the line Bit Error Rate exceeds the currently configured value of the relevant instance of apsConfigSdBerThreshold. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime.
signalFailures	long	apsChanStatusSignalFailures	A count of Signal Failure conditions that have been detected on the incoming signal. This condition occurs when a loss of signal, loss of frame, AIS-L or a Line bit error rate exceeding the currently configured value of the relevant instance of apsConfigSfBerThreshold. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime.
switchovers	long	apsChanStatusSwitchovers	When queried with index value apsChanConfigNumber other than 0, this object will return the number of times this channel has switched to the protection line. When queried with index value apsChanConfigNumber set to 0, which is the protection line, this object will return the number of times that any working channel has been switched back to the working line from this protection line. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime.
switchoverSeconds	long	apsChanStatusSwitchoverSeconds	The cumulative Protection Switching Duration (PSD) time in seconds. For a working channel, this is the cumulative number of seconds that service was carried on the protection line. For the protection line, this is the cumulative number of seconds that the protection line has been used to carry any working channel traffic. This information is only valid if revertive switching is enabled. The value 0 will be returned otherwise. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime. For example, if the value of an instance of apsChanStatusSwitchoverSeconds changes from a non-zero value to zero due to revertive switching being disabled, it is expected that the corresponding value of apsChanStatusDiscontinuityTime will be updated to reflect the time of the configuration change.

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5620 SAM counter name	Type	MIB counter name	Description
ApsGroupStats MIB table name: APS-MIB.apsStatusTable Monitored class: aps.ApsGroup			
channelMismatches	long	apsStatusChannelMismatches	A count of Channel Mismatch conditions. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.
discontinuityTime	long	apsStatusDiscontinuityTime	The value of sysUpTime on the most recent occasion at which any one or more of this APS group's counters suffered a discontinuity. The relevant counters are the specific instances associated with this APS group of any Counter32 object contained in apsStatusTable. If no such discontinuities have occurred since the last re-initialization of the local management subsystem, then this object contains a zero value.
fEPLFs	long	apsStatusFEPLFs	A count of Far-End Protection-Line Failure conditions. This condition is declared based on receiving SF on the protection line in the K1 byte. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.
modeMismatches	long	apsStatusModeMismatches	A count of Mode Mismatch conditions. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.
pSBFs	long	apsStatusPSBFs	A count of Protection Switch Byte Failure conditions. This condition occurs when either an inconsistent APS byte or an invalid code is detected. An inconsistent APS byte occurs when no three consecutive K1 bytes of the last 12 successive frames are identical, starting with the last frame containing a previously consistent byte. An invalid code occurs when the incoming K1 byte contains an unused code or a code irrelevant for the specific switching operation (e.g., Reverse Request while no switching request is outstanding) in three consecutive frames. An invalid code also occurs when the incoming K1 byte contains an invalid channel number in three consecutive frames. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.

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Table E-5 bgp statistics

5620 SAM counter name	Type	MIB counter name	Description
PeerStats MIB table name: TIMETRA-BGP-MIB.tBgpPeerNgOperTable Monitored class: bgp.Peer			
flaps	long	tBgpPeerNgOperFlaps	tBgpPeerNgOperFlaps indicates the number of flaps of updates from this peer.
inputQueueMessages	long	tBgpPeerNgOperInputQueueMsgs	tBgpPeerNgOperInputQueueMsgs indicates the number of unprocessed messages in the queue, from this peer.
lastEvent	long	tBgpPeerNgOperLastEvent	tBgpPeerNgOperLastEvent indicates the last BGP event of this peer.
lastRestartTime	long	tBgpPeerNgOperLastRestartTime	tBgpPeerNgOperLastRestartTime indicates the last time the peer attempted restart.
lastState	long	tBgpPeerNgOperLastState	tBgpPeerNgOperLastState indicates the last BGP state of this peer.
mcastActivePrefixes	long	tBgpPeerNgOperMCastV4ActivePfxs	The value of tBgpPeerNgOperMCastV4ActivePfxs indicates the number of active IPv4 multicast prefixes from this peer.
mcastPrefixesSuppressedByDamping	long	tBgpPeerNgOperMCastV4SuppPfxDamp	The value of tBgpPeerNgOperMCastV4SuppPfxDamp indicates the number of IPv4 multicast prefixes from this peer, which have been suppressed by damping.
mcastReceivedPrefixes	long	tBgpPeerNgOperMCastV4RecvPfxs	The value of tBgpPeerNgOperMCastV4RecvPfxs indicates the number of IPv4 multicast prefixes received from this peer.
mcastSentPrefixes	long	tBgpPeerNgOperMCastV4SentPfxs	The value of tBgpPeerNgOperMCastV4SentPfxs indicates the number of IPv4 multicast prefixes transmitted to this peer.
messageOctetsReceived	UINT128	tBgpPeerNgOperMsgOctetsRcvd	tBgpPeerNgOperMsgOctetsRcvd indicates the number of octets received from this peer.
messageOctetsSent	UINT128	tBgpPeerNgOperMsgOctetsSent	tBgpPeerNgOperMsgOctetsSent indicates the number of octets transmitted to this peer.
numberOfRestarts	long	tBgpPeerNgOperNumRestarts	tBgpPeerNgOperNumRestarts indicates the number of times the peer has attempted restart.
outputQueueMessages	long	tBgpPeerNgOperOutputQueueMsgs	tBgpPeerNgOperOutputQueueMsgs indicates the number of untransmitted messages in the queue, to this peer.
pathsReceived	long	tBgpPeerNgOperReceivedPaths	tBgpPeerNgOperReceivedPaths indicates the number of paths received from this peer.
prefixesActive	long	tBgpPeerNgOperActivePrefixes	tBgpPeerNgOperActivePrefixes indicates the number of active IPv4 prefixes from this peer.

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5620 SAM counter name	Type	MIB counter name	Description
prefixesReceived	long	tBgpPeerNgOperReceivedPrefixes	tBgpPeerNgOperReceivedPrefixes indicates the number of IPv4 prefixes received from this peer.
prefixesSent	long	tBgpPeerNgOperSentPrefixes	tBgpPeerNgOperSentPrefixes indicates the number of IPv4 prefixes transmitted to this peer.
prefixesSuppressedByDamping	long	tBgpPeerNgOperV4SuppPfxDamp	The value of tBgpPeerNgOperV4SuppPfxDamp indicates the number of IPv6 prefixes from this peer, which have been suppressed by damping.
v6ActivePrefixes	long	tBgpPeerNgOperV6ActivePrefixes	The value of tBgpPeerNgOperV6ActivePrefixes indicates the number of active IPv6 prefixes from this peer.
v6PrefixesSuppressedByDamping	long	tBgpPeerNgOperV6SuppPfxDamp	The value of tBgpPeerNgOperV6SuppPfxDamp indicates the number of IPv6 prefixes from this peer, which have been suppressed by damping.
v6ReceivedPrefixes	long	tBgpPeerNgOperV6ReceivedPrefixes	The value of tBgpPeerNgOperV6ReceivedPrefixes indicates the number of IPv6 prefixes received from this peer.
v6SentPrefixes	long	tBgpPeerNgOperV6SentPrefixes	The value of tBgpPeerNgOperV6SentPrefixes indicates the number of IPv6 prefixes transmitted to this peer.
vpnActivePrefixes	long	tBgpPeerNgOperVpnActivePrefixes	tBgpPeerNgOperVpnActivePrefixes indicates the number of active VPN IPv4 prefixes from this BGP peer.
vpnPrefixesSuppressedByDamping	long	tBgpPeerNgOperVpnSuppPfxDamp	The value of tBgpPeerNgOperVpnSuppPfxDamp indicates the number of VPN IPv4 prefixes from this peer, which have been suppressed by damping.
vpnReceivedPrefixes	long	tBgpPeerNgOperVpnRecvPrefixes	tBgpPeerNgOperVpnRecvPrefixes indicates the number of received VPN IPv4 prefixes.
vpnSentPrefixes	long	tBgpPeerNgOperVpnSentPrefixes	tBgpPeerNgOperVpnSentPrefixes indicates the number of transmitted VPN IPv4 prefixes.
PeerVprnIpv6Stats MIB table name: TIMETRA-BGP-MIB.tBgpPeerNgOperTable Monitored class: bgp.Peer			
vpnIpv6ActivePfxs	long	tBgpPeerNgOperVpnIpv6ActivePfxs	The value of tBgpPeerNgOperVpnIpv6ActivePfxs indicates the number of active VPN IPv6 prefixes from this peer.
vpnIpv6RecvPfxs	long	tBgpPeerNgOperVpnIpv6RecvPfxs	The value of tBgpPeerNgOperVpnIpv6RecvPfxs indicates the number of VPN IPv6 prefixes received from this peer.

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5620 SAM counter name	Type	MIB counter name	Description
vpnIpv6SentPfxs	long	tBgpPeerNgOperVpnIpv6SentPfxs	The value of tBgpPeerNgOperVpnIpv6SentPfxs indicates the number of VPN IPv6 prefixes transmitted to this peer.
vpnIpv6SuppPfxDamp	long	tBgpPeerNgOperVpnIpv6SuppPfxDamp	The value of tBgpPeerNgOperVpnIpv6SuppPfxDamp indicates the number of VPN IPv6 prefixes from this peer, which have been suppressed by damping.

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Table E-6 equipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AllocatedMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryPoolAllocated Monitored class: equipment.SystemStatsHolder			
allocatedMemory	long	sgiMemoryPoolAllocated	The value of sgiMemoryPoolAllocated indicates the total memory currently allocated in memory-pools on the system. This memory may or may not be currently in use, but is pre-allocated should the software need to use it.
AvailableMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryAvailable Monitored class: equipment.SystemStatsHolder			
availableMemory	long	sgiMemoryAvailable	The value of sgiMemoryAvailable indicates the amount of free memory in the overall system that is not allocated to memory pools, but is available in case a memory pool needs to grow.
FibNextHopStats MIB table name: TIMETRA-VRTR-MIB.vRtrFibStatNextHopTable Monitored class: equipment.BaseCard			
ipActive	long	vRtrFibStatNextHopIPActive	vRtrFibStatNextHopIPActive indicates current active IP next-hop counts for the FIB on the IOM.
ipAvailable	long	vRtrFibStatNextHopIPAvailable	vRtrFibStatNextHopIPAvailable indicates the available IP next-hop counts for the FIB on the IOM.
tunnelActive	long	vRtrFibStatNextHopTunnelActive	vRtrFibStatNextHopTunnelActive indicates current active Tunnel next-hop counts for the FIB on the IOM.
tunnelAvailable	long	vRtrFibStatNextHopTunnelAvailable	vRtrFibStatNextHopTunnelAvailable indicates the available Tunnel next-hop counts for the FIB on the IOM.
FibStats MIB table name: TIMETRA-VRTR-MIB.vRtrFibStatTable Monitored class: equipment.BaseCard			

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5620 SAM counter name	Type	MIB counter name	Description
aggrRoutes	long	vRtrFibStatAggrRoutes	vRtrFibStatAggrRoutes indicates current aggregate route counts for the virtual router.
alarmCount	long	vRtrFibStatAlarmCount	vRtrFibStatAlarmCount indicates the number of times the FIB has raised an alarm due to high FIB usage.
bgpRoutes	long	vRtrFibStatBGPRoutes	vRtrFibStatBGPRoutes indicates current BGP route counts for the virtual router.
bgpVpnRoutes	long	vRtrFibStatBGPVpnRoutes	vRtrFibStatBGPVpnRoutes indicates current BGP VPN route counts for the virtual router.
directRoutes	long	vRtrFibStatDirectRoutes	vRtrFibStatDirectRoutes indicates current direct route counts for the virtual router.
highUtilization	boolean	vRtrFibStatHighUtilizatio n	vRtrFibStatHighUtilization indicates whether or not the FIB on the IOM is experiences persistent high occupancy.
hostRoutes	long	vRtrFibStatHostRoutes	vRtrFibStatHostRoutes indicates current host route counts for the virtual router.
isisRoutes	long	vRtrFibStatISISRoutes	vRtrFibStatISISRoutes indicates current ISIS route counts for the virtual router.
lastAlarmTime	long	vRtrFibStatLastAlarmTim e	vRtrFibStatLastAlarmTime indicates the last time a high FIB usage alarm was raised.
managedRoutes	long	vRtrFibStatManagedRoute s	vRtrFibStatManagedRoutes indicates current managed route counts for the virtual router.
ospfRoutes	long	vRtrFibStatOSPFRoutes	vRtrFibStatOSPFRoutes indicates current OSPF route counts for the virtual router.
overflows	long	vRtrFibStatOverflows	vRtrFibStatOverflows indicates the number of times the FIB has run out of space.
ripRoutes	long	vRtrFibStatRIPRoutes	vRtrFibStatRIPRoutes indicates current RIP route counts for the virtual router.
staticRoutes	long	vRtrFibStatStaticRoutes	vRtrFibStatStaticRoutes indicates current static route counts for the virtual router.
subMgmtRoutes	long	vRtrFibStatSubMgmtRout es	vRtrFibStatSubMgmtRoutes indicates current Sub-management route counts for the virtual router.
v6AggrRoutes	long	vRtrFibStatV6AggrRoutes	vRtrFibStatV6AggrRoutes indicates current aggregate route counts for the virtual router.
v6BGPRoutes	long	vRtrFibStatV6BGPRoutes	vRtrFibStatV6BGPRoutes indicates current BGP route counts for the virtual router.
v6BGPVpnRoutes	long	vRtrFibStatV6BGPVpnRou tes	vRtrFibStatV6BGPVpnRoutes indicates current BGP VPN route counts for the virtual router.
v6DirectRoutes	long	vRtrFibStatV6DirectRoute s	vRtrFibStatV6DirectRoutes indicates current direct route counts for the virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
v6HostRoutes	long	vRtrFibStatV6HostRoutes	vRtrFibStatV6HostRoutes indicates current host route counts for the virtual router.
v6ISISRoutes	long	vRtrFibStatV6ISISRoutes	vRtrFibStatV6ISISRoutes indicates current ISIS route counts for the virtual router.
v6ManagedRoutes	long	vRtrFibStatV6ManagedRoutes	vRtrFibStatV6ManagedRoutes indicates current managed route counts for the virtual router.
v6OSPFRoutes	long	vRtrFibStatV6OSPFRoutes	vRtrFibStatV6OSPFRoutes indicates current OSPF route counts for the virtual router.
v6RIPRoutes	long	vRtrFibStatV6RIPRoutes	vRtrFibStatV6RIPRoutes indicates current RIP route counts for the virtual router.
v6StaticRoutes	long	vRtrFibStatV6StaticRoutes	vRtrFibStatV6StaticRoutes indicates current static route counts for the virtual router.
v6SubMgmtRoutes	long	vRtrFibStatV6SubMgmtRoutes	vRtrFibStatV6SubMgmtRoutes indicates current Sub-management route counts for the virtual router.
InterfaceAdditionalStats MIB table name: IF-MIB.ifXTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
receivedBroadcastPackets	UINT128	ifHCInBroadcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of ifInBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedMulticastPackets	UINT128	ifHCInMulticastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifInMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedTotalOctets	UINT128	ifHCInOctets	The total number of octets received on the interface, including framing characters. This object is a 64-bit version of ifInOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedUnicastPackets	UINT128	ifHCInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of ifInUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedBroadcastPackets	UINT128	ifHCOutBroadcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedMulticastPackets	UINT128	ifHCOutMulticastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifOutMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedTotalOctets	UINT128	ifHCOutOctets	The total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of ifOutOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	UINT128	ifHCOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: IF-MIB.ifTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
outboundBadPackets	long	ifOutErrors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
outboundPacketsDiscarded	long	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedBadPackets	long	ifInErrors	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character- oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedOctets	long	ifInOctets	The total number of octets received on the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedPacketsDiscarded	long	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	long	ifInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnknownProtocolPackets	long	ifInUnknownProtos	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedOctets	long	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	long	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
MediaIndependentStats MIB table name: HC-RMON-MIB.mediaIndependentTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			

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5620 SAM counter name	Type	MIB counter name	Description
dropEvents	long	mediaIndependentDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
droppedFrames	long	mediaIndependentDroppedFrames	The total number of frames which were received by the probe and therefore not accounted for in the mediaIndependentDropEvents, but for which the probe chose not to count for this entry for whatever reason. Most often, this event occurs when the probe is out of some resources and decides to shed load from this collection. This count does not include packets that were not counted because they had MAC-layer errors. Note that, unlike the dropEvents counter, this number is the exact number of frames dropped.
duplex	int	mediaIndependentDuplexMode	The current mode of this link. Note that if the link has full-duplex capabilities but is operating in half-duplex mode, this value will be halfduplex(1).
duplexChanges	long	mediaIndependentDuplexChanges	The number of times this link has changed from full-duplex mode to half-duplex mode or from half-duplex mode to full-duplex mode.
inputSpeed	long	mediaIndependentInputSpeed	The nominal maximum speed in kilobits per second of this half-duplex link or on the inbound connection of this full-duplex link. If the speed is unknown or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
outputSpeed	long	mediaIndependentOutputSpeed	The nominal maximum speed in kilobits per second of this full-duplex link in the direction of the network. If the speed is unknown, the link is half-duplex, or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
receivedBadPackets	long	mediaIndependentInErrors	The total number of bad packets received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedNonUnicastPackets	UINT128	mediaIndependentInNUCastHighCapacityPkts	The total number of non-unicast packets (including bad packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedOctets	UINT128	mediaIndependentInHighCapacityOctets	The total number of octets of data (including those in bad packets) received (excluding framing bits but including FCS octets) on a half-duplex link or on the inbound connection of a full-duplex link.
receivedPackets	UINT128	mediaIndependentInHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a half-duplex link or on the inbound connection of a full-duplex link.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedBadPackets	long	mediaIndependentOutErrors	The total number of bad packets received on a full-duplex link in the direction of the network.
transmittedNonUnicastPackets	UINT128	mediaIndependentOutNUCastHighCapacityPkts	The total number of packets (including bad packets) received on a full-duplex link in the direction of the network.
transmittedOctets	UINT128	mediaIndependentOutHighCapacityOctets	The total number of octets of data (including those in bad packets) received on a full-duplex link in the direction of the network (excluding framing bits but including FCS octets).
transmittedPackets	UINT128	mediaIndependentOutHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a full-duplex link in the direction of the network.
PortNetEgressStats MIB table name: TIMETRA-PORT-MIB.tmnxPortNetEgressStatsTable Monitored class: equipment.PhysicalPort			
inProfileOctetsDropped	UINT128	tmnxPortNetEgressDroInProfOcts	tmnxPortNetEgressDroInProfOcts indicates the number of conforming network egress octets dropped on this port using this queue.
inProfileOctetsForwarded	UINT128	tmnxPortNetEgressFwdInProfOcts	tmnxPortNetEgressFwdInProfOcts indicates the number of conforming network egress octets forwarded on this port using this queue.
inProfilePacketsDropped	UINT128	tmnxPortNetEgressDroInProfPkts	tmnxPortNetEgressDroInProfPkts indicates the number of conforming network egress packets dropped on this port using this queue.
inProfilePacketsForwarded	UINT128	tmnxPortNetEgressFwdInProfPkts	tmnxPortNetEgressFwdInProfPkts indicates the number of conforming network egress packets forwarded on this port using this queue.
outOfProfileOctetsDropped	UINT128	tmnxPortNetEgressDroOutProfOcts	tmnxPortNetEgressDroOutProfOcts indicates the number of exceeding network egress octets dropped on this port using this queue.
outOfProfileOctetsForwarded	UINT128	tmnxPortNetEgressFwdOutProfOcts	tmnxPortNetEgressFwdOutProfOcts indicates the number of exceeding network egress octets forwarded on this port using this queue.
outOfProfilePacketsDropped	UINT128	tmnxPortNetEgressDroOutProfPkts	tmnxPortNetEgressDroOutProfPkts indicates the number of exceeding network egress packets dropped on this port using this queue.
outOfProfilePacketsForwarded	UINT128	tmnxPortNetEgressFwdOutProfPkts	tmnxPortNetEgressFwdOutProfPkts indicates the number of exceeding network egress packets forwarded on this port using this queue.

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5620 SAM counter name	Type	MIB counter name	Description
queueId	long	tmnxPortNetEgressQueueIndex	tmnxPortNetEgressQueueIndex serves as the tertiary index. When used in conjunction with tmnxChassisIndex and tmnxPortPortID, it uniquely identifies a network egress queue for the specified port in the managed system.
PortNetIngressStats MIB table name: TIMETRA-PORT-MIB.tmnxPortNetIngressStatsTable Monitored class: equipment.PhysicalPort			
inProfileOctetsDropped	UINT128	tmnxPortNetIngressDroInProfOcts	tmnxPortNetIngressDroInProfOcts indicates the number of conforming network ingress octets dropped on this port using this queue.
inProfileOctetsForwarded	UINT128	tmnxPortNetIngressFwdInProfOcts	tmnxPortNetIngressFwdInProfOcts indicates the number of conforming network ingress octets forwarded on this port using this queue.
inProfilePacketsDropped	UINT128	tmnxPortNetIngressDroInProfPkts	tmnxPortNetIngressDroInProfPkts indicates the number of conforming network ingress packets dropped on this port using this queue.
inProfilePacketsForwarded	UINT128	tmnxPortNetIngressFwdInProfPkts	tmnxPortNetIngressFwdInProfPkts indicates the number of conforming network ingress packets forwarded on this port using this queue.
outOfProfileOctetsDropped	UINT128	tmnxPortNetIngressDroOutProfOcts	tmnxPortNetIngressDroOutProfOcts indicates the number of exceeding network ingress octets dropped on this port using this queue.
outOfProfileOctetsForwarded	UINT128	tmnxPortNetIngressFwdOutProfOcts	tmnxPortNetIngressFwdOutProfOcts indicates the number of exceeding network ingress octets forwarded on this port using this queue.
outOfProfilePacketsDropped	UINT128	tmnxPortNetIngressDroOutProfPkts	tmnxPortNetIngressDroOutProfPkts indicates the number of exceeding network ingress packets dropped on this port using this queue.
outOfProfilePacketsForwarded	UINT128	tmnxPortNetIngressFwdOutProfPkts	tmnxPortNetIngressFwdOutProfPkts indicates the number of exceeding network ingress packets forwarded on this port using this queue.
SystemCpuStats MIB table name: TIMETRA-SYSTEM-MIB.sgiCpuUsage Monitored class: equipment.SystemStatsHolder			
systemCpuUsage	long	sgiCpuUsage	The value of sgiCpuUsage indicates the current CPU utilization for the system.
SystemMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryUsed Monitored class: equipment.SystemStatsHolder			
systemMemoryUsage	long	sgiMemoryUsed	The value of sgiMemoryUsed indicates the total pre-allocated pool memory currently in use on the system.

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Table E-7 ethernetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AdditionalEthernetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortEtherTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
highCapacityPackets1519toMaxFrameSize	UINT128	tmnxPortEtherHCPkts1519toMax	The total number of packets (including bad packets) received that were between 1519 octets in length and the maximum frame size, usually 12287 octets inclusive (excluding framing bits but including FCS octets). The lower 32-bits of this 64-bit counter will equal the value of tmnxPortEtherHCPkts1519toMax. The high 32-bits of this counter will equal the value of tmnxPortEtherHCOverPkts1519toMax.
packets1519toMaxFrameSize	long	tmnxPortEtherPkts1519toMax	The total number of packets received that were longer than 1518 octets but less than the maximum frame size for the particular medium, usually 12287 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
Dot3Stats MIB table name: EtherLike-MIB.dot3StatsTable Monitored class: equipment.PhysicalPort			
alignmentErrors	long	dot3StatsAlignmentErrors	A count of frames received on a particular interface that are not an integral number of octets in length and do not pass the FCS check. The count represented by an instance of this object is incremented when the alignmentError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. This counter does not increment for group encoding schemes greater than 4 bits per group. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsAlignmentErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.7, aAlignmentErrors.

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5620 SAM counter name	Type	MIB counter name	Description
carrierSenseErrors	long	dot3StatsCarrierSenseErrors	The number of times that the carrier sense condition was lost or never asserted when attempting to transmit a frame on a particular interface. The count represented by an instance of this object is incremented at most once per transmission attempt, even if the carrier sense condition fluctuates during a transmission attempt. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.13, aCarrierSenseErrors.
deferredTransmissions	long	dot3StatsDeferredTransmissions	A count of frames for which the first transmission attempt on a particular interface is delayed because the medium is busy. The count represented by an instance of this object does not include frames involved in collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.9, aFramesWithDeferredXmissions.
duplex	int	dot3StatsDuplexStatus	The current mode of operation of the MAC entity. 'unknown' indicates that the current duplex mode could not be determined. Management control of the duplex mode is accomplished through the MAU MIB. When an interface does not support autonegotiation, or when autonegotiation is not enabled, the duplex mode is controlled using ifMauDefaultType. When autonegotiation is supported and enabled, duplex mode is controlled using ifMauAutoNegAdvertisedBits. In either case, the currently operating duplex mode is reflected both in this object and in ifMauType. Note that this object provides redundant information with ifMauType. Normally, redundant objects are discouraged. However, in this instance, it allows a management application to determine the duplex status of an interface without having to know every possible value of ifMauType. This was felt to be sufficiently valuable to justify the redundancy. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.32, aDuplexStatus.

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5620 SAM counter name	Type	MIB counter name	Description
excessiveCollisions	long	dot3StatsExcessiveCollisions	A count of frames for which transmission on a particular interface fails due to excessive collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.11, aFramesAbortedDueToXSColls.
fcsErrors	long	dot3StatsFCSErrors	A count of frames received on a particular interface that are an integral number of octets in length but do not pass the FCS check. This count does not include frames received with frame-too-long or frame-too-short error. The count represented by an instance of this object is incremented when the frameCheckError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. Note: Coding errors detected by the physical layer for speeds above 10 Mb/s will cause the frame to fail the FCS check. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFCSErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.6, aFrameCheckSequenceErrors.

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5620 SAM counter name	Type	MIB counter name	Description
frameTooLongs	long	dot3StatsFrameTooLongs	A count of frames received on a particular interface that exceed the maximum permitted frame size. The count represented by an instance of this object is incremented when the frameTooLong status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. For interfaces operating at 10 Gb/s, this counter can roll over in less than 80 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFrameTooLongs object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.25, aFrameTooLongErrors.
internalMacReceiveErrors	long	dot3StatsInternalMacReceiveErrors	A count of frames for which reception on a particular interface fails due to an internal MAC sublayer receive error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsFrameTooLongs object, the dot3StatsAlignmentErrors object, or the dot3StatsFCSErrors object. The precise meaning of the count represented by an instance of this object is implementation-specific. In particular, an instance of this object may represent a count of receive errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacReceiveErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.15, aFramesLostDueToIntMACRcvError.

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5620 SAM counter name	Type	MIB counter name	Description
internalMacTransmitErrors	long	dot3StatsInternalMacTransmitErrors	A count of frames for which transmission on a particular interface fails due to an internal MAC sublayer transmit error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsLateCollisions object, the dot3StatsExcessiveCollisions object, or the dot3StatsCarrierSenseErrors object. The precise meaning of the count represented by an instance of this object is implementation- specific. In particular, an instance of this object may represent a count of transmission errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacTransmitErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.12, aFramesLostDueToIntMACXmitError.
lateCollisions	long	dot3StatsLateCollisions	The number of times that a collision is detected on a particular interface later than one slotTime into the transmission of a packet. A (late) collision included in a count represented by an instance of this object is also considered as a (generic) collision for purposes of other collision-related statistics. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.10, aLateCollisions.

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5620 SAM counter name	Type	MIB counter name	Description
multipleCollisionFrames	long	dot3StatsMultipleCollisionFrames	A count of frames that are involved in more than one collision and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsSingleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.4, aMultipleCollisionFrames.
singleCollisionFrames	long	dot3StatsSingleCollisionFrames	A count of frames that are involved in a single collision, and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsMultipleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.3, aSingleCollisionFrames.
sqeTestErrors	long	dot3StatsSQETestErrors	A count of times that the SQE TEST ERROR is received on a particular interface. The SQE TEST ERROR is set in accordance with the rules for verification of the SQE detection mechanism in the PLS Carrier Sense Function as described in IEEE Std. 802.3, 2000 Edition, section 7.2.4.6. This counter does not increment on interfaces operating at speeds greater than 10 Mb/s, or on interfaces operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 7.2.4.6, also 30.3.2.1.4, aSQETestErrors.

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5620 SAM counter name	Type	MIB counter name	Description
symbolErrors	long	dot3StatsSymbolErrors	For an interface operating at 100 Mb/s, the number of times there was an invalid data symbol when a valid carrier was present. For an interface operating in half-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than slotTime, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' or 'carrier extend error' on the GMII. For an interface operating in full-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' on the GMII. For an interface operating at 10 Gb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Receive Error' on the XGMII. The count represented by an instance of this object is incremented at most once per carrier event, even if multiple symbol errors occur during the carrier event. This count does not increment if a collision is present. This counter does not increment when the interface is operating at 10 Mb/s. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsSymbolErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.2.1.5, aSymbolErrorDuringCarrier.
EthernetHighCapacityStats MIB table name: HC-RMON-MIB.etherStatsHighCapacityTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
packets1024to1518Octets	UINT128	etherStatsHighCapacityPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
packets128to255Octets	UINT128	etherStatsHighCapacityPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	UINT128	etherStatsHighCapacityPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	UINT128	etherStatsHighCapacityPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	UINT128	etherStatsHighCapacityPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	UINT128	etherStatsHighCapacityPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	UINT128	etherStatsHighCapacityOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). If the network is half-duplex Fast Ethernet, this object can be used as a reasonable estimate of utilization. If greater precision is desired, the etherStatsHighCapacityPkts and etherStatsHighCapacityOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (.96 + .64) + (Octets * .08) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent. This table is not appropriate for monitoring full-duplex ethernets. If the network is a full-duplex ethernet and the mediaIndependentTable is monitoring that network, the utilization can be calculated as follows: 1) Determine the utilization of the inbound path by using the appropriate equation (for ethernet or fast ethernet) to determine the utilization, substituting mediaIndependentInPkts for etherStatsHighCapacityPkts, and mediaIndependentInOctets for etherStatsHighCapacityOctets. Call the resulting utilization inUtilization. 2) Determine the utilization of the outbound path by using the same equation to determine the utilization, substituting mediaIndependentOutPkts for etherStatsHighCapacityPkts, and mediaIndependentOutOctets for etherStatsHighCapacityOctets. Call the resulting utilization outUtilization. 3) The utilization is the maximum of inUtilization and outUtilization. This metric shows the amount of percentage of bandwidth that is left before congestion will be experienced on the link.
totalPackets	UINT128	etherStatsHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
EthernetStats MIB table name: RMON-MIB.etherStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
broadcastPackets	long	etherStatsBroadcastPkts	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets.

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5620 SAM counter name	Type	MIB counter name	Description
collisions	long	etherStatsCollisions	The best estimate of the total number of collisions on this Ethernet segment. The value returned will depend on the location of the RMON probe. Section 8.2.1.3 (10BASE-5) and section 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision, in the receive mode, if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coax segments to which the repeater is connected.
crcAlignErrors	long	etherStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
dropEvents	long	etherStatsDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
fragments	long	etherStatsFragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that it is entirely normal for etherStatsFragments to increment. This is because it counts both runts (which are normal occurrences due to collisions) and noise hits.

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5620 SAM counter name	Type	MIB counter name	Description
jabbers	long	etherStatsJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different than the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition where any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
multicastPackets	long	etherStatsMulticastPkts	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address.
oversizePackets	long	etherStatsOversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
packets1024to1518Octets	long	etherStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).
packets128to255Octets	long	etherStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	long	etherStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	long	etherStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	long	etherStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	long	etherStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	long	etherStatsOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). This object can be used as a reasonable estimate of 10-Megabit ethernet utilization. If greater precision is desired, the etherStatsPkts and etherStatsOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (9.6 + 6.4) + (Octets * .8) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent.
totalPackets	long	etherStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
undersizePackets	long	etherStatsUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.
OtuIfStats MIB table name: TIMETRA-OTU-MIB.tmnxOtuIfRawStatsTable Monitored class: equipment.PhysicalPort			
fecCorrOnes	long	tmnxOtuIfRawStatsFECCorrOnes	The value of tmnxOtuIfRawStatsFECCorrOnes indicates the number of Forward Error Correction (FEC) corrected ones.
fecCorrZeros	long	tmnxOtuIfRawStatsFECCorrZeros	The value of tmnxOtuIfRawStatsFECCorrZeros indicates the number of Forward Error Correction (FEC) corrected zeros.
fecSes	long	tmnxOtuIfRawStatsFECSES	The value of tmnxOtuIfRawStatsFECSES indicates the number of Forward Error Correction (FEC) Severely Errors Seconds (SES).
fecUncorrSr	long	tmnxOtuIfRawStatsFECUncorrSR	The value of tmnxOtuIfRawStatsFECUncorrSR indicates the number of Forward Error Correction (FEC) Uncorrectable Sub-Rows.
hcFecCorrOnes	UINT128	tmnxOtuIfRawStatsHCFECCorrOnes	The value of tmnxOtuIfRawStatsFECCorrOnes indicates the High Capacity number of Forward Error Correction (FEC) corrected ones.
hcFecCorrZeros	UINT128	tmnxOtuIfRawStatsHCFECCorrZeros	The value of tmnxOtuIfRawStatsHCFECCorrZeros indicates the High Capacity number of Forward Error Correction (FEC) corrected zeros.

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5620 SAM counter name	Type	MIB counter name	Description
hcFecUncorrSr	UINT128	tmnxOtuIfRawStatsHCFECUncorrSR	The value of tmnxOtuIfRawStatsHCFECUncorrSR indicates the High Capacity number of Forward Error Correction (FEC) Uncorrectable Sub-Rows.
hcPmBei	UINT128	tmnxOtuIfRawStatsHCPMBEI	The value of tmnxOtuIfRawStatsPMBEI indicates the High Capacity number of Path Monitoring (PM) Backward Error Indication (BEI) errors.
hcPmBip8	UINT128	tmnxOtuIfRawStatsHCPMBIP8	The value of tmnxOtuIfRawStatsHCPMBIP8 indicates the High Capacity number of Path Monitoring (PM) BIP8 errors.
hcSmBei	UINT128	tmnxOtuIfRawStatsHCSMBEI	The value of tmnxOtuIfRawStatsHCSMBEI indicates the High Capacity number of Section Monitoring (SM) Backward Error Indication (BEI) errors.
hcSmBip8	UINT128	tmnxOtuIfRawStatsHCSMBIP8	The value of tmnxOtuIfRawStatsHCSMBIP8 indicates the High Capacity number of Section Monitoring (SM) BIP8 errors.
ofFecCorrOnes	long	tmnxOtuIfRawStatsOFFECCorrOnes	The value of tmnxOtuIfRawStatsFECCorrOnes indicates the number of times the tmnxOtuIfRawStatsFECCorrOnes overflowed.
ofFecCorrZeros	long	tmnxOtuIfRawStatsOFFECCorrZeros	The value of tmnxOtuIfRawStatsOFFECCorrZeros indicates the number of times the tmnxOtuIfRawStatsFECCorrZeros overflowed.
ofFecUncorrSr	long	tmnxOtuIfRawStatsOFFECUncorrSR	The value of tmnxOtuIfRawStatsOFFECUncorrSR indicates the number of times the tmnxOtuIfRawStatsFECUncorrSR overflowed.
ofPmBei	long	tmnxOtuIfRawStatsOFPMBEI	The value of tmnxOtuIfRawStatsOFPMBEI indicates the number of times tmnxOtuIfRawStatsPMBEI overflowed.
ofPmBip8	long	tmnxOtuIfRawStatsOFPMBIP8	The value of tmnxOtuIfRawStatsOFPMBIP8 indicates the number of times the tmnxOtuIfRawStatsPMBIP8 overflowed.
ofSmBei	long	tmnxOtuIfRawStatsOFSMBEI	The value of tmnxOtuIfRawStatsOFSMBEI indicates the number of times the tmnxOtuIfRawStatsSMBEI overflowed.
ofSmBip8	long	tmnxOtuIfRawStatsOFSMBIP8	The value of tmnxOtuIfRawStatsOFSMBIP8 indicates the number of times the tmnxOtuIfRawStatsSMBIP8 overflowed.
pmBei	long	tmnxOtuIfRawStatsPMBEI	The value of tmnxOtuIfRawStatsPMBEI indicates the number of Path Monitoring (PM) Backward Error Indication (BEI) errors.
pmBip8	long	tmnxOtuIfRawStatsPMBIP8	The value of tmnxOtuIfRawStatsPMBIP8 indicates the number of Path Monitoring (PM) BIP8 errors.

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5620 SAM counter name	Type	MIB counter name	Description
pmSes	long	tmnxOtuIfRawStatsPMSES	The value of tmnxOtuIfRawStatsPMSES indicates the number of Path Monitoring (PM) Severely Errored Seconds (SES).
smBei	long	tmnxOtuIfRawStatsSMBEI	The value of tmnxOtuIfRawStatsSMBEI indicates the number of Section Monitoring (SM) Backward Error Indication (BEI) errors.
smBip8	long	tmnxOtuIfRawStatsSMBIP 8	The value of tmnxOtuIfRawStatsSMBIP8 indicates the number of Section Monitoring (SM) BIP8 errors.
smSes	long	tmnxOtuIfRawStatsSMSES	The value of tmnxOtuIfRawStatsSMSES indicates the number of Section Monitoring (SM) Severely Errored Seconds (SES).
PortEgrQosQueueStat MIB table name: TIMETRA-PORT-MIB.tmnxPortEgrQosQStatTable Monitored class: ethernetequipment.AccessEgrQGroup			
portEgrQosQStatDpdInProfOcts	UINT128	tmnxPortEgrQosQStatDpd InProfOcts	The value of tmnxPortEgrQosQStatDpdInProfOcts indicates the number of in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatDpdInProfPkts	UINT128	tmnxPortEgrQosQStatDpd InProfPkts	The value of tmnxPortEgrQosQStatDpdInProfPkts indicates the number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatDpdOutProfOcts	UINT128	tmnxPortEgrQosQStatDpd OutProfOcts	The value of tmnxPortEgrQosQStatDpdOutProfOcts indicates the number of out-of-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatDpdOutProfPkts	UINT128	tmnxPortEgrQosQStatDpd OutProfPkts	The value of tmnxPortEgrQosQStatDpdOutProfPkts indicates the number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatFwdInProfOcts	UINT128	tmnxPortEgrQosQStatFwd InProfOcts	The value of tmnxPortEgrQosQStatFwdInProfOcts indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
portEgrQosQStatFwdInProfPkts	UINT128	tmnxPortEgrQosQStatFwd InProfPkts	The value of tmnxPortEgrQosQStatFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
portEgrQosQStatFwdOutProfOcts	UINT128	tmnxPortEgrQosQStatFwd OutProfOcts	The value of tmnxPortEgrQosQStatFwdOutProfOcts indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
portEgrQosQStatFwdOutProfPkts	UINT128	tmnxPortEgrQosQStatFwdOutProfPkts	The value of tmnxPortEgrQosQStatFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
portEgrQosQStatQueueId	long	tmnxPortEgrQosQStatQueueId	The value of tmnxPortEgrQosQStatQueueId specifies the queue-group queue ID which is used as the fourth index to the table entry.
PortIngQosQueueStat MIB table name: TIMETRA-PORT-MIB.tmnxPortIngQosQStatTable Monitored class: ethernetequipment.AccessIngrQGroup			
portIngQosQStatDpdHiPrioOcts	UINT128	tmnxPortIngQosQStatDpdHiPrioOcts	The value of tmnxPortIngQosQStatDpdHiPrioOcts indicates the number of high priority octets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatDpdHiPrioPkts	UINT128	tmnxPortIngQosQStatDpdHiPrioPkts	The value of tmnxPortIngQosQStatDpdHiPrioPkts indicates the number of high priority packets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatDpdLoPrioOcts	UINT128	tmnxPortIngQosQStatDpdLoPrioOcts	The value of tmnxPortIngQosQStatDpdLoPrioOcts indicates the number of low priority octets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatDpdLoPrioPkts	UINT128	tmnxPortIngQosQStatDpdLoPrioPkts	The value of tmnxPortIngQosQStatDpdLoPrioPkts indicates the number of low priority packets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatFwdInProfOcts	UINT128	tmnxPortIngQosQStatFwdInProfOcts	The value of tmnxPortIngQosQStatFwdInProfOcts indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
portIngQosQStatFwdInProfPkts	UINT128	tmnxPortIngQosQStatFwdInProfPkts	The value of tmnxPortIngQosQStatFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
portIngQosQStatFwdOutProfOcts	UINT128	tmnxPortIngQosQStatFwdOutProfOcts	The value of tmnxPortIngQosQStatFwdOutProfOcts indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
portIngQosQStatFwdOutProfPkts	UINT128	tmnxPortIngQosQStatFwdOutProfPkts	The value of tmnxPortIngQosQStatFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
portIngQosQStatOffHiPrioOcts	UINT128	tmnxPortIngQosQStatOffHiPrioOcts	The value of tmnxPortIngQosQStatOffHiPrioOcts indicates the number of high priority octets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatOffHiPrioPkts	UINT128	tmnxPortIngQosQStatOffHiPrioPkts	The value of tmnxPortIngQosQStatOffHiPrioPkts indicates the number of high priority packets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatOffLoPrioOcts	UINT128	tmnxPortIngQosQStatOffLoPrioOcts	The value of tmnxPortIngQosQStatOffLoPrioOcts indicates the number of low priority octets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatOffLoPrioPkts	UINT128	tmnxPortIngQosQStatOffLoPrioPkts	The value of tmnxPortIngQosQStatOffLoPrioPkts indicates the number of low priority packets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatQueueId	long	tmnxPortIngQosQStatQueueId	The value of tmnxPortIngQosQStatQueueId specifies the queue-group queue ID which is used as the fourth index to the table entry.
portIngQosQStatUncolOctsOff	UINT128	tmnxPortIngQosQStatUncolOctsOff	The value of tmnxPortIngQosQStatUncolOctsOff indicates the number of uncolored octets offered to the ingress Qchip.
portIngQosQStatUncolPktsOff	UINT128	tmnxPortIngQosQStatUncolPktsOff	The value of tmnxPortIngQosQStatUncolPktsOff indicates the number of uncolored packets offered to the ingress Qchip.
PortNetEgrQueueStat MIB table name: TIMETRA-PORT-MIB.tmnxPortNetEgrQStatTable Monitored class: ethernetequipment.NetworkEgrQGroup			
portNetEgrQDroInProfOcts	UINT128	tmnxPortNetEgrQDroInProfOcts	The value of tmnxPortNetEgrQDroInProfOcts indicates the number of conforming network egress octets dropped on this port using this queue-group queue.
portNetEgrQDroInProfPkts	UINT128	tmnxPortNetEgrQDroInProfPkts	The value of tmnxPortNetEgrQDroInProfPkts indicates the number of conforming network egress packets dropped on this port using this queue-group queue.

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5620 SAM counter name	Type	MIB counter name	Description
portNetEgrQDroOutProfOcts	UINT128	tmnxPortNetEgrQDroOutProfOcts	The value of tmnxPortNetEgrQDroOutProfOcts indicates the number of exceeding network egress octets dropped on this port using this queue-group queue.
portNetEgrQDroOutProfPkts	UINT128	tmnxPortNetEgrQDroOutProfPkts	The value of tmnxPortNetEgrQDroOutProfPkts indicates the number of exceeding network egress packets dropped on this port using this queue-group queue.
portNetEgrQFwdInProfOcts	UINT128	tmnxPortNetEgrQFwdInProfOcts	The value of tmnxPortNetEgrQFwdInProfOcts indicates the number of conforming network egress octets forwarded on this port using this queue-group queue.
portNetEgrQFwdInProfPkts	UINT128	tmnxPortNetEgrQFwdInProfPkts	The value of tmnxPortNetEgrQFwdInProfPkts indicates the number of conforming network egress packets forwarded on this port using this queue-group queue.
portNetEgrQFwdOutProfOcts	UINT128	tmnxPortNetEgrQFwdOutProfOcts	The value of tmnxPortNetEgrQFwdOutProfOcts indicates the number of exceeding network egress octets forwarded on this port using this queue-group queue.
portNetEgrQFwdOutProfPkts	UINT128	tmnxPortNetEgrQFwdOutProfPkts	The value of tmnxPortNetEgrQFwdOutProfPkts indicates the number of exceeding network egress packets forwarded on this port using this queue-group queue.
portNetEgrQStatQueueId	long	tmnxPortEgrQosQStatQueueId	The value of tmnxPortEgrQosQStatQueueId specifies the queue-group queue ID which is used as the fourth index to the table entry.
QosDroppedOctetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortIngrMdaQosStatTable Monitored class: equipment.PhysicalPort			
qosClassifier0DroppedOctets	UINT128	tmnxPortIngrMdaQos00StatDropOcts	tmnxPortIngrMdaQos00StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier10DroppedOctets	UINT128	tmnxPortIngrMdaQos10StatDropOcts	tmnxPortIngrMdaQos10StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier11DroppedOctets	UINT128	tmnxPortIngrMdaQos11StatDropOcts	tmnxPortIngrMdaQos11StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier12DroppedOctets	UINT128	tmnxPortIngrMdaQos12StatDropOcts	tmnxPortIngrMdaQos12StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier13DroppedOctets	UINT128	tmnxPortIngrMdaQos13StatDropOcts	tmnxPortIngrMdaQos13StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier14DroppedOctets	UINT128	tmnxPortIngrMdaQos14StatDropOcts	tmnxPortIngrMdaQos14StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier15DroppedOctets	UINT128	tmnxPortIngrMdaQos15StatDropOcts	tmnxPortIngrMdaQos15StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier1DroppedOctets	UINT128	tmnxPortIngrMdaQos01StatDropOcts	tmnxPortIngrMdaQos01StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier2DroppedOctets	UINT128	tmnxPortIngrMdaQos02StatDropOcts	tmnxPortIngrMdaQos02StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier3DroppedOctets	UINT128	tmnxPortIngrMdaQos03StatDropOcts	tmnxPortIngrMdaQos03StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier4DroppedOctets	UINT128	tmnxPortIngrMdaQos04StatDropOcts	tmnxPortIngrMdaQos04StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier5DroppedOctets	UINT128	tmnxPortIngrMdaQos05StatDropOcts	tmnxPortIngrMdaQos05StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier6DroppedOctets	UINT128	tmnxPortIngrMdaQos06StatDropOcts	tmnxPortIngrMdaQos06StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier7DroppedOctets	UINT128	tmnxPortIngrMdaQos07StatDropOcts	tmnxPortIngrMdaQos07StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier8DroppedOctets	UINT128	tmnxPortIngrMdaQos08StatDropOcts	tmnxPortIngrMdaQos08StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier9DroppedOctets	UINT128	tmnxPortIngrMdaQos09StatDropOcts	tmnxPortIngrMdaQos09StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
QosDroppedPacketStats MIB table name: TIMETRA-PORT-MIB.tmnxPortIngrMdaQosStatTable Monitored class: equipment.PhysicalPort			
qosClassifier0DroppedPackets	UINT128	tmnxPortIngrMdaQos00StatDropPkts	tmnxPortIngrMdaQos00StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier10DroppedPackets	UINT128	tmnxPortIngrMdaQos10StatDropPkts	tmnxPortIngrMdaQos10StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier11DroppedPackets	UINT128	tmnxPortIngrMdaQos11StatDropPkts	tmnxPortIngrMdaQos11StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier12DroppedPackets	UINT128	tmnxPortIngrMdaQos12StatDropPkts	tmnxPortIngrMdaQos12StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier13DroppedPackets	UINT128	tmnxPortIngrMdaQos13StatDropPkts	tmnxPortIngrMdaQos13StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier14DroppedPackets	UINT128	tmnxPortIngrMdaQos14StatDropPkts	tmnxPortIngrMdaQos14StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier15DroppedPackets	UINT128	tmnxPortIngrMdaQos15StatDropPkts	tmnxPortIngrMdaQos15StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier1DroppedPackets	UINT128	tmnxPortIngrMdaQos01StatDropPkts	tmnxPortIngrMdaQos01StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier2DroppedPackets	UINT128	tmnxPortIngrMdaQos02StatDropPkts	tmnxPortIngrMdaQos02StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier3DroppedPackets	UINT128	tmnxPortIngrMdaQos03StatDropPkts	tmnxPortIngrMdaQos03StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier4DroppedPackets	UINT128	tmnxPortIngrMdaQos04StatDropPkts	tmnxPortIngrMdaQos04StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier5DroppedPackets	UINT128	tmnxPortIngrMdaQos05StatDropPkts	tmnxPortIngrMdaQos05StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier6DroppedPackets	UINT128	tmnxPortIngrMdaQos06StatDropPkts	tmnxPortIngrMdaQos06StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier7DroppedPackets	UINT128	tmnxPortIngrMdaQos07StatDropPkts	tmnxPortIngrMdaQos07StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier8DroppedPackets	UINT128	tmnxPortIngrMdaQos08StatDropPkts	tmnxPortIngrMdaQos08StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier9DroppedPackets	UINT128	tmnxPortIngrMdaQos09StatDropPkts	tmnxPortIngrMdaQos09StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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Table E-8 fr statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: TIMETRA-PORT-MIB.tmnxFRDlcmiTable Monitored class: fr.Interface			
lmiDiscardedMessages	long	tmnxFRDlcmiDiscardedMsgs	tmnxFRDlcmiDiscardedMsgs indicates the number of times the LMI agent discarded a received message because it wasn't expecting it, the type of message was incorrect, or the contents of the message were invalid.

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5620 SAM counter name	Type	MIB counter name	Description
lmiInvalidRxSeqNumMessages	long	tmnxFRDlcmiInvRxSeqNumMsgs	tmnxFRDlcmiInvRxSeqNumMsgs indicates the number of times the LMI agent received a message with an invalid receive sequence number: i.e. a sequence number that does not match the last transmitted sequence number of the agent.
lmiRxStatusEnquiryMessages	long	tmnxFRDlcmiRxStatusEnqMsgs	tmnxFRDlcmiRxStatusEnqMsgs indicates the number of LMI Status Enquiry messages received on this Frame Relay interface.
lmiRxStatusMessages	long	tmnxFRDlcmiRxStatusMsgs	tmnxFRDlcmiRxStatusMsgs indicates the number of LMI Status messages received on this Frame Relay interface.
lmiStatusEnquiryMsgTimeouts	long	tmnxFRDlcmiStatusEnqMsgTimeouts	tmnxFRDlcmiStatusEnqMsgTimeouts indicates the number of times the LMI agent did not receive a Status Enquiry message within the allotted time.
lmiStatusMsgTimeouts	long	tmnxFRDlcmiStatusMsgTimeouts	tmnxFRDlcmiStatusMsgTimeouts indicates the number of times the LMI agent did not receive a Status message within the allotted time.
lmiTxStatusEnquiryMessages	long	tmnxFRDlcmiTxStatusEnqMsgs	tmnxFRDlcmiTxStatusEnqMsgs indicates the number of LMI Status Enquiry messages transmitted on this Frame Relay interface.
lmiTxStatusMessages	long	tmnxFRDlcmiTxStatusMsgs	tmnxFRDlcmiTxStatusMsgs indicates the number of LMI Status messages transmitted on this Frame Relay interface.

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Table E-9 gsmp statistics

5620 SAM counter name	Type	MIB counter name	Description
GsmpSessionStats MIB table name: TIMETRA-GSMP-MIB.tmnxAncpSessionStatsTable Monitored class: gsmp.GsmpGroupNeighborSession			
ancpAckReceived	long	tmnxAncpSesStatRxAck	The value of tmnxAncpSesStatRxAck indicates the number of GSMP ACK messages received in this ANCP session.
ancpAckTransmitted	long	tmnxAncpSesStatTxAck	The value of tmnxAncpSesStatTxAck indicates the number of GSMP ACK messages that were transmitted to the ANCP neighbor in this ANCP session.
ancpLoopBackReceived	long	tmnxAncpSesStatRxLoopback	The value of tmnxAncpSesStatRxLoopback indicates the number of GSMP Loopback messages received in this ANCP session.
ancpLoopBackTransmitted	long	tmnxAncpSesStatTxLoopback	The value of tmnxAncpSesStatTxLoopback indicates the number of GSMP Loopback messages that were transmitted to the ANCP neighbor in this ANCP session.

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5620 SAM counter name	Type	MIB counter name	Description
ancpPortDownReceived	long	tmnxAncpSesStatRxPortDown	The value of tmnxAncpSesStatRxPortDown indicates the number of GSMP 'PortDown' messages received in this ANCP session.
ancpPortDownTransmitted	long	tmnxAncpSesStatTxPortDown	The value of tmnxAncpSesStatTxPortDown indicates the number of GSMP 'PortDown' messages that were transmitted to the ANCP neighbor in this session.
ancpPortUpReceived	long	tmnxAncpSesStatRxPortUp	The value of tmnxAncpSesStatRxPortUp indicates the number of GSMP 'PortUp' messages received in this ANCP session.
ancpPortUpTransmitted	long	tmnxAncpSesStatTxPortUp	The value of tmnxAncpSesStatTxPortUp indicates the number of GSMP 'PortUp' messages that were transmitted to the ANCP neighbor in this session.
ancpRstAckReceived	long	tmnxAncpSesStatRxRstAck	The value of tmnxAncpSesStatRxRstAck indicates the number of GSMP RST ACK messages received in this ANCP session.
ancpRstAckTransmitted	long	tmnxAncpSesStatTxRstAck	The value of tmnxAncpSesStatTxRstAck indicates the number of GSMP RST ACK messages that were transmitted to the ANCP neighbor in this session.
ancpSynAckReceived	long	tmnxAncpSesStatRxSynAck	The value of tmnxAncpSesStatRxSynAck indicates the number of GSMP SYN ACK messages received in this ANCP session.
ancpSynAckTransmitted	long	tmnxAncpSesStatTxSynAck	The value of tmnxAncpSesStatTxSynAck indicates the number of GSMP SYN ACK messages that were transmitted to the ANCP neighbor in this ANCP session.
ancpSynReceived	long	tmnxAncpSesStatRxSyn	The value of tmnxAncpSesStatRxSyn indicates the number of GSMP SYN messages received in this ANCP session.
ancpSynTransmitted	long	tmnxAncpSesStatTxSyn	The value of tmnxAncpSesStatTxSyn indicates the number of GSMP SYN messages that were transmitted to the ANCP neighbor in this ANCP session.
ancpTransmittedDropped	long	tmnxAncpSesStatTxDrop	The value of tmnxAncpSesStatTxDrop indicates the number of GSMP protocol messages that were created by the system in order for them to be sent to the ACNP neighbor, but were never transmitted.

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Table E-10 isa statistics

5620 SAM counter name	Type	MIB counter name	Description
AaGroupEgrQStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxGrpStatusEgrQTable Monitored class: isa.AaEgrQueue			

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5620 SAM counter name	Type	MIB counter name	Description
droInProfOcts	long	tmnxBsxGrpStatusEgrQDroInPOcts	The value of tmnxBsxGrpStatusEgrQDroInPOcts indicates the number of in profile bytes discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
droInProfPkts	long	tmnxBsxGrpStatusEgrQDroInPPkts	The value of tmnxBsxGrpStatusEgrQDroInPPkts indicates the number of in profile packets discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
droOutProfOcts	long	tmnxBsxGrpStatusEgrQDroOutPOcts	The value of tmnxBsxGrpStatusEgrQDroOutPOcts indicates the number of out of profile bytes discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
droOutProfPkts	long	tmnxBsxGrpStatusEgrQDroOutPPkts	The value of tmnxBsxGrpStatusEgrQDroOutPPkts indicates the number of out of profile packets discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
fwdInProfOcts	long	tmnxBsxGrpStatusEgrQFwdInPOcts	The value of tmnxBsxGrpStatusEgrQFwdInPOcts indicates the number of in profile bytes diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
fwdInProfPkts	long	tmnxBsxGrpStatusEgrQFwdInPPkts	The value of tmnxBsxGrpStatusEgrQFwdInPPkts indicates the number of in profile packets diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
fwdOutProfOcts	long	tmnxBsxGrpStatusEgrQFwdOutPOcts	The value of tmnxBsxGrpStatusEgrQFwdOutPOcts indicates the number of out of profile bytes diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
fwdOutProfPkts	long	tmnxBsxGrpStatusEgrQFwdOutPPkts	The value of tmnxBsxGrpStatusEgrQFwdOutPPkts indicates the number of out of profile packets diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCDroInProfOcts	UINT128	tmnxBsxGrpStatusEgrQHCDroInPOcts	The value of tmnxBsxGrpStatusEgrQHCDroInPOcts indicates the number of in profile bytes discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.

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5620 SAM counter name	Type	MIB counter name	Description
hCDroInProfPkts	UINT128	tmnxBsxGrpStatusEgrQHCDroInPPkts	The value of tmnxBsxGrpStatusEgrQHCDroInPPkts indicates the number of in profile packets discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCDroOutProfOcts	UINT128	tmnxBsxGrpStatusEgrQHCDroOutPOcts	The value of tmnxBsxGrpStatusEgrQHCDroOutPOcts indicates the number of out of profile bytes discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCDroOutProfPkts	UINT128	tmnxBsxGrpStatusEgrQHCDroOutPPkts	The value of tmnxBsxGrpStatusEgrQHCDroOutPPkts indicates the number of out of profile packets discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCFwdInProfOcts	UINT128	tmnxBsxGrpStatusEgrQHCFwdInPOcts	The value of tmnxBsxGrpStatusEgrQHCFwdInPOcts indicates the number of in profile bytes diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCFwdInProfPkts	UINT128	tmnxBsxGrpStatusEgrQHCFwdInPPkts	The value of tmnxBsxGrpStatusEgrQHCFwdInPPkts indicates the number of in profile packets diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCFwdOutProfOcts	UINT128	tmnxBsxGrpStatusEgrQHCFwdOutPOcts	The value of tmnxBsxGrpStatusEgrQHCFwdOutPOcts indicates the number of out of profile bytes diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCFwdOutProfPkts	UINT128	tmnxBsxGrpStatusEgrQHCFwdOutPPkts	The value of tmnxBsxGrpStatusEgrQHCFwdOutPPkts indicates the number of out of profile packets diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
AaGroupIngQStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxGrpStatusIngQTable Monitored class: isa.AaIngQueue			
droInProfOcts	long	tmnxBsxGrpStatusIngQDroInPOcts	The value of tmnxBsxGrpStatusIngQDroInPOcts indicates the number of in profile bytes discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
droInProfPkts	long	tmnxBsxGrpStatusIngQDroInPPkts	The value of tmnxBsxGrpStatusIngQDroInPPkts indicates the number of in profile packets discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.

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5620 SAM counter name	Type	MIB counter name	Description
droOutProfOcts	long	tmnxBsxGrpStatusIngQDroOutPOcts	The value of tmnxBsxGrpStatusIngQDroOutPOcts indicates the number of out of profile bytes discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
droOutProfPkts	long	tmnxBsxGrpStatusIngQDroOutPPkts	The value of tmnxBsxGrpStatusIngQDroOutPPkts indicates the number of out of profile packets discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
fwdInProfOcts	long	tmnxBsxGrpStatusIngQFwdInPOcts	The value of tmnxBsxGrpStatusIngQFwdInPOcts indicates the number of in profile bytes diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
fwdInProfPkts	long	tmnxBsxGrpStatusIngQFwdInPPkts	The value of tmnxBsxGrpStatusIngQFwdInPPkts indicates the number of in profile packets diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
fwdOutProfOcts	long	tmnxBsxGrpStatusIngQFwdOutPOcts	The value of tmnxBsxGrpStatusIngQFwdOutPOcts indicates the number of out of profile bytes diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
fwdOutProfPkts	long	tmnxBsxGrpStatusIngQFwdOutPPkts	The value of tmnxBsxGrpStatusIngQFwdOutPPkts indicates the number of out of profile packets diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCDroInProfOcts	UINT128	tmnxBsxGrpStatusIngQHCDroInPOcts	The value of tmnxBsxGrpStatusIngQHCDroInPOcts indicates the number of in profile bytes discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCDroInProfPkts	UINT128	tmnxBsxGrpStatusIngQHCDroInPPkts	The value of tmnxBsxGrpStatusIngQHCDroInPPkts indicates the number of in profile packets discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCDroOutProfOcts	UINT128	tmnxBsxGrpStatusIngQHCDroOutPOcts	The value of tmnxBsxGrpStatusIngQHCDroOutPOcts indicates the number of out of profile bytes discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.

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5620 SAM counter name	Type	MIB counter name	Description
hCDroOutProfPkts	UINT128	tmnxBsxGrpStatusIngQHCDroOutPPkts	The value of tmnxBsxGrpStatusIngQHCDroOutPPkts indicates the number of out of profile packets discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCFwdInProfOcts	UINT128	tmnxBsxGrpStatusIngQHCFwdInPOcts	The value of tmnxBsxGrpStatusIngQHCFwdInPOcts indicates the number of in profile bytes diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCFwdInProfPkts	UINT128	tmnxBsxGrpStatusIngQHCFwdInPPkts	The value of tmnxBsxGrpStatusIngQHCFwdInPPkts indicates the number of in profile packets diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCFwdOutProfOcts	UINT128	tmnxBsxGrpStatusIngQHCFwdOutPOcts	The value of tmnxBsxGrpStatusIngQHCFwdOutPOcts indicates the number of out of profile bytes diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCFwdOutProfPkts	UINT128	tmnxBsxGrpStatusIngQHCFwdOutPPkts	The value of tmnxBsxGrpStatusIngQHCFwdOutPPkts indicates the number of out of profile packets diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
AaSapSumStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxAaSubSumTable Monitored class: isa.AaSapInfo			
aaSap	String	tmnxBsxAaSubscriber	The Application Assurance Subscriber identifier. The format of this object is determined by the value of the tmnxBsxAaSubscriberType.
BsxMdaStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxGrpStatusTable Monitored classes: • equipment.Shelf • equipment.DaughterCardSlot			
flows	long	tmnxBsxGrpStatusFlows	The value of tmnxBsxGrpStatusFlows indicates the number of flows seen by the ISA-AA MDA(s). Note that if the same 5-tuple is seen for a different flow within the flow timeout, it will still be considered one flow.
flowsCurrent	long	tmnxBsxGrpStatusFlowsCurrent	The value of tmnxBsxGrpStatusFlowsCurrent indicates the number of flows currently being tracked by the ISA-AA MDA(s).

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5620 SAM counter name	Type	MIB counter name	Description
flowSetupRate	long	tmnxBsxGrpStatusFlowSetupRate	The value of tmnxBsxGrpStatusFlowSetupRate indicates the number of flow setups per second. The calculation is weighted to give half of the weight to flows setup within the last five minutes and 25 weighting to flows setup in the previous five minutes, etc.
hCFlows	UINT128	tmnxBsxGrpStatusHCFlows	The value of tmnxBsxGrpStatusHCFlows indicates the number of flows seen by the ISA-AA MDA(s). Note that if the same 5-tuple is seen for a different flow within the flow timeout, it will still be considered one flow.
hCOctsDiscCongIn	UINT128	tmnxBsxGrpStatusHCOctsDiscCongIn	The value of tmnxBsxGrpStatusHCOctsDiscCongIn indicates the number of bytes discarded by the IOMs prior to the ISA-AA MDA(s) due to egress IOM congestion.
hCOctsDiscCongMda	UINT128	tmnxBsxGrpStatusHCOctsDisCongMda	The value of tmnxBsxGrpStatusHCOctsDisCongMda indicates the number of bytes discarded by the ISA-AA MDA(s) due to congestion.
hCOctsDiscCongOut	UINT128	tmnxBsxGrpStatusHCOctsDisCongOut	The value of tmnxBsxGrpStatusHCOctsDisCongOut indicates the number of bytes discarded by the IOMs after the ISA-AA MDA(s) due to ingress IOM congestion.
hCOctsDiscErrors	UINT128	tmnxBsxGrpStatusHCOctsDiscErrors	The value of tmnxBsxGrpStatusHCOctsDiscErrors indicates the number of bytes discarded due to unrecoverable errors.
hCOctsDiscPolicy	UINT128	tmnxBsxGrpStatusHCOctsDiscPolicy	The value of tmnxBsxGrpStatusHCOctsDiscPolicy indicates the number of bytes discarded by the ISA-AA MDA(s) due to policy policers or discard actions.
hCOctsFromMda	UINT128	tmnxBsxGrpStatusHCOctsFromMda	The value of tmnxBsxGrpStatusHCOctsFromMda indicates the number of bytes sent from the ISA-AA MDA(s) to the local IOM.
hCOctsIn	UINT128	tmnxBsxGrpStatusHCOctsIn	The value of tmnxBsxGrpStatusHCOctsIn indicates the number of bytes diverted from ingress IOMs towards the ISA-AA MDA(s).
hCOctsInMda	UINT128	tmnxBsxGrpStatusHCOctsInMda	The value of tmnxBsxGrpStatusHCOctsInMda indicates the number of bytes buffered by the ISA-AA MDA(s).
hCOctsInspected	UINT128	tmnxBsxGrpStatusHCOctsInspected	The value of tmnxBsxGrpStatusHCOctsInspected indicates the number of bytes sent for protocol determination by the ISA-AA MDA(s).

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5620 SAM counter name	Type	MIB counter name	Description
hCOctsOut	UINT128	tmnxBsxGrpStatusHCOctsOut	The value of tmnxBsxGrpStatusHCOctsOut indicates the number of bytes sent to egress IOMs from the ISA-AA MDA(s).
hCOctsPolicyByPass	UINT128	tmnxBsxGrpStatusHCOctsPolicyByps	The value of tmnxBsxGrpStatusHCOctsPolicyByps indicates the number of bytes passed untouched that did not have statistics or policy applied.
hCOctsToMda	UINT128	tmnxBsxGrpStatusHCOctsToMda	The value of tmnxBsxGrpStatusHCOctsToMda indicates the number of bytes sent from an IOM towards the ISA-AA MDA(s).
hCPktsDiscCongIn	UINT128	tmnxBsxGrpStatusHCPktsDiscCongIn	The value of tmnxBsxGrpStatusHCPktsDiscCongIn indicates the number of packets discarded by the IOMs prior to the ISA-AA MDA(s) due to egress IOM congestion.
hCPktsDiscCongMda	UINT128	tmnxBsxGrpStatusHCPktsDisCongMda	The value of tmnxBsxGrpStatusHCPktsDisCongMda indicates the number of packets discarded by the ISA-AA MDA(s) due to congestion.
hCPktsDiscCongOut	UINT128	tmnxBsxGrpStatusHCPktsDisCongOut	The value of tmnxBsxGrpStatusHCPktsDisCongOut indicates the number of packets discarded by the IOMs after the ISA-AA MDA(s) due to ingress IOM congestion.
hCPktsDiscErrors	UINT128	tmnxBsxGrpStatusHCPktsDiscErrors	The value of tmnxBsxGrpStatusHCPktsDiscErrors indicates the number of packets discarded due to unrecoverable errors.
hCPktsDiscPolicy	UINT128	tmnxBsxGrpStatusHCPktsDiscPolicy	The value of tmnxBsxGrpStatusHCPktsDiscPolicy indicates the number of packets discarded by the ISA-AA MDA(s) due to policy policers or discard actions.
hCPktsFromMda	UINT128	tmnxBsxGrpStatusHCPktsFromMda	The value of tmnxBsxGrpStatusHCPktsFromMda indicates the number of packets sent from the ISA-AA MDA(s) to the local IOM.
hCPktsIn	UINT128	tmnxBsxGrpStatusHCPktsIn	The value of tmnxBsxGrpStatusHCPktsIn indicates the number of packets diverted from ingress IOMs towards the ISA-AA MDA(s).
hCPktsInMda	UINT128	tmnxBsxGrpStatusHCPktsInMda	The value of tmnxBsxGrpStatusHCPktsInMda indicates the number of packets buffered by the ISA-AA MDA(s).
hCPktsInPchipErrors	UINT128	tmnxBsxGrpStatusHCPktsInPChipErs	The value of tmnxBsxGrpStatusHCPktsInPChipErs indicates the number of packets discarded by the egress P-chip due to errors in the packets.

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5620 SAM counter name	Type	MIB counter name	Description
hCPktsInspected	UINT128	tmnxBsxGrpStatusHCPktsInspected	The value of tmnxBsxGrpStatusHCPktsInspected indicates the number of packets sent for protocol determination by the ISA-AA MDA(s).
hCPktsOut	UINT128	tmnxBsxGrpStatusHCPktsOut	The value of tmnxBsxGrpStatusHCPktsOut indicates the number of packets sent to egress IOMs from the ISA-AA MDA(s).
hCPktsOutPchipErrors	UINT128	tmnxBsxGrpStatusHCPktsOutPChipEr	The value of tmnxBsxGrpStatusHCPktsOutPChipEr indicates the number of packets discarded by the ingress P-chip due to errors in the packets.
hCPktsPolicyByPass	UINT128	tmnxBsxGrpStatusHCPktsPolicyByps	The value of tmnxBsxGrpStatusHCPktsPolicyByps indicates the number of packets passed untouched that did not have statistics or policy applied.
hCPktsToMda	UINT128	tmnxBsxGrpStatusHCPktsToMda	The value of tmnxBsxGrpStatusHCPktsToMda indicates the number of packets sent from an IOM towards the ISA-AA MDA(s).
octsDiscCongIn	long	tmnxBsxGrpStatusOctsDiscCongIn	The value of tmnxBsxGrpStatusOctsDiscCongIn indicates the number of bytes discarded by the IOMs prior to the ISA-AA MDA(s) due to egress IOM congestion.
octsDiscCongMda	long	tmnxBsxGrpStatusOctsDisCongMda	The value of tmnxBsxGrpStatusOctsDisCongMda indicates the number of bytes discarded by the ISA-AA MDA(s) due to congestion.
octsDiscCongOut	long	tmnxBsxGrpStatusOctsDisCongOut	The value of tmnxBsxGrpStatusOctsDisCongOut indicates the number of bytes discarded by the IOMs after the ISA-AA MDA(s) due to ingress IOM congestion.
octsDiscErrors	long	tmnxBsxGrpStatusOctsDiscErrors	The value of tmnxBsxGrpStatusOctsDiscErrors indicates the number of bytes discarded due to unrecoverable errors.
octsDiscPolicy	long	tmnxBsxGrpStatusOctsDiscPolicy	The value of tmnxBsxGrpStatusOctsDiscPolicy indicates the number of bytes discarded by the ISA-AA MDA(s) due to policy.
octsFromMda	long	tmnxBsxGrpStatusOctsFromMda	The value of tmnxBsxGrpStatusOctsFromMda indicates the number of bytes sent from the ISA-AA MDA(s) to the local IOM.
octsIn	long	tmnxBsxGrpStatusOctsIn	The value of tmnxBsxGrpStatusOctsIn indicates the number of bytes diverted from ingress IOMs towards the ISA-AA MDA(s).
octsInMda	long	tmnxBsxGrpStatusOctsInMda	The value of tmnxBsxGrpStatusOctsInMda indicates the number of bytes buffered by the ISA-AA MDA(s).

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5620 SAM counter name	Type	MIB counter name	Description
octsInspected	long	tmnxBsxGrpStatusOctsInspected	The value of tmnxBsxGrpStatusOctsInspected indicates the number of bytes sent for protocol determination by the ISA-AA MDA(s).
octsOut	long	tmnxBsxGrpStatusOctsOut	The value of tmnxBsxGrpStatusOctsOut indicates the number of bytes sent to egress IOMs from the ISA-AA MDA(s).
octsPolicyByPass	long	tmnxBsxGrpStatusOctsPolicyByps	The value of tmnxBsxGrpStatusOctsPolicyByps indicates the number of bytes passed untouched that did not have statistics or policy applied.
octsToMda	long	tmnxBsxGrpStatusOctsToMda	The value of tmnxBsxGrpStatusOctsToMda indicates the number of bytes sent from an IOM towards the ISA-AA MDA(s).
pktsDiscCongIn	long	tmnxBsxGrpStatusPktsDiscCongIn	The value of tmnxBsxGrpStatusPktsDiscCongIn indicates the number of packets discarded by the IOMs prior to the ISA-AA MDA(s) due to egress IOM congestion.
pktsDiscCongMda	long	tmnxBsxGrpStatusPktsDisCongMda	The value of tmnxBsxGrpStatusPktsDisCongMda indicates the number of packets discarded by the ISA-AA MDA(s) due to congestion.
pktsDiscCongOut	long	tmnxBsxGrpStatusPktsDisCongOut	The value of tmnxBsxGrpStatusPktsDisCongOut indicates the number of packets discarded by the IOMs after the ISA-AA MDA(s) due to ingress IOM congestion.
pktsDiscErrors	long	tmnxBsxGrpStatusPktsDiscErrors	The value of tmnxBsxGrpStatusPktsDiscErrors indicates the number of packets discarded due to unrecoverable errors.
pktsDiscPolicy	long	tmnxBsxGrpStatusPktsDiscPolicy	The value of tmnxBsxGrpStatusPktsDiscPolicy indicates the number of packets discarded by the ISA-AA MDA(s) due to policy.
pktsFromMda	long	tmnxBsxGrpStatusPktsFromMda	The value of tmnxBsxGrpStatusPktsFromMda indicates the number of packets sent from the ISA-AA MDA(s) to the local IOM.
pktsIn	long	tmnxBsxGrpStatusPktsIn	The value of tmnxBsxGrpStatusPktsIn indicates the number of packets diverted from ingress IOMs towards the ISA-AA MDA(s).
pktsInMda	long	tmnxBsxGrpStatusPktsInMda	The value of tmnxBsxGrpStatusPktsInMda indicates the number of packets buffered by the ISA-AA MDA(s).
pktsInPChipErrors	long	tmnxBsxGrpStatusPktsInPChipErs	The value of tmnxBsxGrpStatusPktsInPChipErs indicates the number of packets discarded by the egress P-chip due to errors in the packets.

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5620 SAM counter name	Type	MIB counter name	Description
pktsInspected	long	tmnxBsxGrpStatusPktsInspected	The value of tmnxBsxGrpStatusPktsInspected indicates the number of packets sent for protocol determination by the ISA-AA MDA(s).
pktsOut	long	tmnxBsxGrpStatusPktsOut	The value of tmnxBsxGrpStatusPktsOut indicates the number of packets sent to egress IOMs from the ISA-AA MDA(s).
pktsOutPChipErrors	long	tmnxBsxGrpStatusPktsOutPChipEr	The value of tmnxBsxGrpStatusPktsOutPChipEr indicates the number of packets discarded by the ingress P-chip due to errors in the packets.
pktsPolicyByPass	long	tmnxBsxGrpStatusPktsPolicyByps	The value of tmnxBsxGrpStatusPktsPolicyByps indicates the number of packets passed untouched that did not have statistics or policy applied.
pktsToMda	long	tmnxBsxGrpStatusPktsToMda	The value of tmnxBsxGrpStatusPktsToMda indicates the number of packets sent from an IOM towards the ISA-AA MDA(s).
subsCurrent	long	tmnxBsxGrpStatusSubsCurrent	The value of tmnxBsxGrpStatusSubsCurrent indicates the number of subscribers currently with flow records in the ISA-AA MDA(s).
subsDiverted	long	tmnxBsxGrpStatusSubsDiverted	The value of tmnxBsxGrpStatusSubsDiverted indicates the number of subscribers defined in TIMETRA-SUBSCRIBER-MGMT-MIB::tmnxSubInfoAppProfile in the tmnxSubscriberInfoTable with tmnxBsxAppProfDivert set to 'true'.
trafficRate	long	tmnxBsxGrpStatusTrafficRate	The value of tmnxBsxGrpStatusTrafficRate indicates the traffic rate in kilo-bits per second (kbps) incoming to the ISA-AA MDA(s).
VideoGroupMemberStats MIB table name: TIMETRA-VIDEO-MIB.tmnxVdoGrpMDATable Monitored class: isa.VideoGroupMember			
vdoGrpMdaActiveRtcpSessions	long	tmnxVdoGrpMdaActiveRtcpSessions	The value of tmnxVdoGrpMdaActiveRtcpSessions indicates the number of active Real Time Transport Control Protocol (RTCP) sessions on this MDA.
vdoGrpMdaAdStreamAborts	long	tmnxVdoGrpMdaAdStreamAborts	The value of tmnxVdoGrpMdaAdStreamAborts indicates the number of ad stream aborts on this MDA. An ad stream abort could happen when an egress reset happens.
vdoGrpMdaAdStreamResets	long	tmnxVdoGrpMdaAdStreamResets	The value of tmnxVdoGrpMdaAdStreamResets indicates the number of ad stream resets on this MDA. An ad stream reset occurs when the ingress ad stream stops.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpMdaAvailableMemory	long	tmnxVdoGrpMdaAvailableMemory	The value of tmnxVdoGrpMdaAvailableMemory indicates the amount of cache available on the MDA for storing the video stream.
vdoGrpMdaBwInUse	long	tmnxVdoGrpMdaBwInUse	The value of tmnxVdoGrpMdaBwInUse indicates the total aggregate bandwidth of the currently running egress streams.
vdoGrpMdaChannelAllocFails	long	tmnxVdoGrpMdaChannelAllocFails	The value of tmnxVdoGrpMdaChannelAllocFails indicates the number of failed channel allocations on this MDA.
vdoGrpMdaChannels	long	tmnxVdoGrpMdaChannels	The value of tmnxVdoGrpMdaChannels indicates the number of channels being served on this MDA.
vdoGrpMdaEgressStreamResets	long	tmnxVdoGrpMdaEgressStreamResets	The value of tmnxVdoGrpMdaEgressStreamResets indicates the number of egress stream resets on this MDA. An egress stream reset occurs when there are no packets to transmit on the MDA.
vdoGrpMdaHighPktPoolLimitHit	long	tmnxVdoGrpMdaHighPktPoolLimitHit	The value of tmnxVdoGrpMdaHighPktPoolLimitHit indicates the number of times the high packet pool limit has been hit. A high value of this object indicates potential failure in ingress packet storage.
vdoGrpMdaIngressStreamResets	long	tmnxVdoGrpMdaIngressStreamResets	The value of tmnxVdoGrpMdaIngressStreamResets indicates the number of ingress stream resets on this MDA. An ingress stream reset occurs when the ingress stream stopped coming in for more than one second.
vdoGrpMdaMaxBwExceeded	long	tmnxVdoGrpMdaMaxBwExceeded	The value of tmnxVdoGrpMdaMaxBwExceeded indicates the number of times maximum allowed bandwidth has been exceeded for each egress stream.
vdoGrpMdaRequestedRtpPkts	long	tmnxVdoGrpMdaRequestedRtpPkts	The value of tmnxVdoGrpMdaRequestedRtpPkts indicates the number of Real-time Transport Protocol (RTP) packets requested in the Real-time Transport Control Protocol (RTCP) feedback (FB) messages received on this MDA.
vdoGrpMdaRtcpConfigErrors	long	tmnxVdoGrpMdaRtcpConfigErrors	The value of tmnxVdoGrpMdaRtcpConfigErrors indicates the number of Real-time Transport Control Protocol (RTCP) config errors on this MDA. These errors occur when there is inconsistency between the RTCP values and the configured values.
vdoGrpMdaRtcpIntErrors	long	tmnxVdoGrpMdaRtcpIntErrors	The value of tmnxVdoGrpMdaRtcpIntErrors indicates the number of Real-time Transport Control Protocol (RTCP) interface related errors on this MDA.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpMdaRtcpIpcErrors	long	tmnxVdoGrpMdaRtcpIpcErrors	The value of tmnxVdoGrpMdaRtcpIpcErrors indicates the number of Real-time Transport Control Protocol (RTCP) inter-process communication message processing errors on this MDA.
vdoGrpMdaRtcpParseErrors	long	tmnxVdoGrpMdaRtcpParseErrors	The value of tmnxVdoGrpMdaRtcpParseErrors indicates the number of Real-time Transport Control Protocol (RTCP) packet parsing errors on this MDA.
vdoGrpMdaRtcpSgErrors	long	tmnxVdoGrpMdaRtcpSgErrors	The value of tmnxVdoGrpMdaRtcpSgErrors indicates the number of Real-time Transport Control Protocol (RTCP) channel errors on this MDA. These errors occue when a channel is not found for a given interface to process RTCP packets.
vdoGrpMdaRtcpSubErrors	long	tmnxVdoGrpMdaRtcpSubErrors	The value of tmnxVdoGrpMdaRtcpSubErrors indicates the number of Real-time Transport Control Protocol (RTCP) subscriber parameter errors on this MDA. These errors occur when the subscriber calculations exceed the maximum allowed bandwidth.
vdoGrpMdaRxDataOctets	UINT128	tmnxVdoGrpMdaRxDataOctets	The value of tmnxVdoGrpMdaRxDataOctets indicates the number of data octets received on this MDA.
vdoGrpMdaRxDataOctetsHigh32	long	tmnxVdoGrpMdaRxDataOctetsHigh32	The value of tmnxVdoGrpMdaRxDataOctetsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaRxDataOctets.
vdoGrpMdaRxDataOctetsLow32	long	tmnxVdoGrpMdaRxDataOctetsLow32	The value of tmnxVdoGrpMdaRxDataOctetsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaRxDataOctets.
vdoGrpMdaRxDataPacketErrors	UINT128	tmnxVdoGrpMdaRxDataPacketErrors	The value of tmnxVdoGrpMdaRxDataPacketErrors indicates the number of malformed or non-RTP (Real Time Transport Protocol) packets received on this MDA.
vdoGrpMdaRxDataPackets	UINT128	tmnxVdoGrpMdaRxDataPackets	The value of tmnxVdoGrpMdaRxDataPackets indicates the number of data packets received on this MDA.
vdoGrpMdaRxDataPacketsHigh32	long	tmnxVdoGrpMdaRxDataPacketsHigh32	The value of tmnxVdoGrpMdaRxDataPacketsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaRxDataPackets.
vdoGrpMdaRxDataPacketsLow32	long	tmnxVdoGrpMdaRxDataPacketsLow32	The value of tmnxVdoGrpMdaRxDataPacketsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaRxDataPackets.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpMdaRxDataPktErrsHigh32	long	tmnxVdoGrpMdaRxDataPktErrsHigh32	The value of tmnxVdoGrpMdaRxDataPktErrsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaRxDataPacketErrors.
vdoGrpMdaRxDataPktErrsLow32	long	tmnxVdoGrpMdaRxDataPktErrsLow32	The value of tmnxVdoGrpMdaRxDataPktErrsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaRxDataPacketErrors.
vdoGrpMdaSsrcCollisions	long	tmnxVdoGrpMdaSsrcCollisions	The value of tmnxVdoGrpMdaSsrcCollisions indicates the number of synchronization source (SSRC) id collisions on this MDA.
vdoGrpMdaTxDataOctets	UINT128	tmnxVdoGrpMdaTxDataOctets	The value of tmnxVdoGrpMdaTxDataOctets indicates the number of data octets transmitted on this MDA.
vdoGrpMdaTxDataOctetsHigh32	long	tmnxVdoGrpMdaTxDataOctetsHigh32	The value of tmnxVdoGrpMdaTxDataOctetsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaTxDataOctets.
vdoGrpMdaTxDataOctetsLow32	long	tmnxVdoGrpMdaTxDataOctetsLow32	The value of tmnxVdoGrpMdaTxDataOctetsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaTxDataOctets.
vdoGrpMdaTxDataPacketErrors	UINT128	tmnxVdoGrpMdaTxDataPacketErrors	The value of tmnxVdoGrpMdaTxDataPacketErrors indicates the number of failed data packets due to lack of resources to be transmitted on this MDA.
vdoGrpMdaTxDataPackets	UINT128	tmnxVdoGrpMdaTxDataPackets	The value of tmnxVdoGrpMdaTxDataPackets indicates the number of data packets transmitted on this MDA.
vdoGrpMdaTxDataPacketsHigh32	long	tmnxVdoGrpMdaTxDataPacketsHigh32	The value of tmnxVdoGrpMdaTxDataPacketsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaTxDataPackets.
vdoGrpMdaTxDataPacketsLow32	long	tmnxVdoGrpMdaTxDataPacketsLow32	The value of tmnxVdoGrpMdaTxDataPacketsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaTxDataPackets.
vdoGrpMdaTxDataPktErrsHigh32	long	tmnxVdoGrpMdaTxDataPktErrsHigh32	The value of tmnxVdoGrpMdaTxDataPktErrsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaTxDataPacketErrors.
vdoGrpMdaTxDataPktErrsLow32	long	tmnxVdoGrpMdaTxDataPktErrsLow32	The value of tmnxVdoGrpMdaTxDataPktErrsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaTxDataPacketErrors.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpMdaTxLostPackets	long	tmnxVdoGrpMdaTxLostPackets	The value of tmnxVdoGrpMdaTxLostPackets indicates the number of packets not found in the video MDA buffer for retransmission. When a retransmission request arrives, packets are checked in the buffer and if they are not found, the value of this object is incremented.
vdoGrpMdaUsedMemory	long	tmnxVdoGrpMdaUsedMemory	The value of tmnxVdoGrpMdaUsedMemory indicates the amount of cache being used by the video group for storing the video stream.

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Table E-11 isis statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceLevelOneReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelOneSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			

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5620 SAM counter name	Type	MIB counter name	Description
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
LinkStatePduSiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			
csnpDropped	long	vRtrIsisCSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisCSNPDrop.
csnpReceived	long	vRtrIsisCSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisCSNPRecd.
csnpRetransmitted	long	vRtrIsisCSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisCSNPRetrans.
csnpSent	long	vRtrIsisCSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisCSNPSent.
helloDropped	long	vRtrIsisIIHDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisIIHDrop.
helloReceived	long	vRtrIsisIIHRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisIIHRecd.

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5620 SAM counter name	Type	MIB counter name	Description
helloRetransmitted	long	vRtrIsisIIHRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisIIHRetrans.
helloSent	long	vRtrIsisIIHSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisIIHSent.
lspDropped	long	vRtrIsisLSPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisLSPDrop.
lspReceived	long	vRtrIsisLSPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisLSPRecd.
lspRetransmitted	long	vRtrIsisLSPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisLSPRetrans.
lspSent	long	vRtrIsisLSPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisLSPSent.
psnpDropped	long	vRtrIsisPSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisPSNPDrop.
psnpReceived	long	vRtrIsisPSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisPSNPRecd.
psnpRetransmitted	long	vRtrIsisPSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisPSNPRetrans.
psnpSent	long	vRtrIsisPSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisPSNPSent.
unknownDropped	long	vRtrIsisUnknownDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisUnknownDrop.
unknownReceived	long	vRtrIsisUnknownRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisUnknownRecd.
unknownRetransmitted	long	vRtrIsisUnknownRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisUnknownRetrans.
unknownSent	long	vRtrIsisUnknownSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisUnknownSent.
SiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			
cspfDroppedRequests	long	vRtrIsisCSPFDroppedRequests	vRtrIsisCSPFDroppedRequests maintains the number of dropped CSPF requests by the protocol.

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5620 SAM counter name	Type	MIB counter name	Description
cspfPathsFound	long	vRtrIsisCSPFPathsFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which paths satisfying the constraints were found.
cspfPathsNotFound	long	vRtrIsisCSPFPathsNotFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which no paths satisfying the constraints were found.
cspfRequests	long	vRtrIsisCSPFRequests	vRtrIsisCSPFRequests maintains the number of CSPF requests made to the protocol.
initiatedPurges	long	vRtrIsisInitiatedPurges	The value of vRtrIsisInitiatedPurges counts the number of times purges have been initiated.
lspRegenerations	long	vRtrIsisLSPRegenerations	The value of vRtrIsisLSPRegenerations maintains the count of LSP regenerations.
spfRuns	long	vRtrIsisSpfRuns	The value of vRtrIsisSpfRuns indicates the number of times shortest path first calculations have been made.

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Table E-12 l2fib statistics

5620 SAM counter name	Type	MIB counter name	Description
MFibGrpSrcStats MIB table name: TIMETRA-SERV-MIB.tlsMFibStatsTable Monitored class: l2fib.MFibGrpSrc			
forwardedOctets	UINT128	tlsMFibStatsForwardedOctets	The value of tlsMFibStatsForwardedOctets indicates the number of octets that were forwarded to the SAPs and SDPs listed in the tlsMFibInfoTable.
forwardedPkts	UINT128	tlsMFibStatsForwardedPkts	The value of tlsMFibStatsForwardedPkts indicates the number of multicast packets that were forwarded to the SAPs and SDPs listed in the tlsMFibInfoTable.

Table E-13 l2fwd statistics

5620 SAM counter name	Type	MIB counter name	Description
AccessInterfaceStpStats MIB table name: TIMETRA-SAP-MIB.sapTlsInfoTable Monitored class: l2fwd.AccessInterfaceStp			
forwardTransitions	long	sapTlsStpForwardTransitions	The value of the object sapTlsStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.

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5620 SAM counter name	Type	MIB counter name	Description
inBadBpdus	long	sapTlsStpInBadBpdus	This object specifies the number of bad BPDUs received on this SAP.
inConfigBpdus	long	sapTlsStpInConfigBpdus	The value of the object sapTlsStpInConfigBpdus indicates the number of Configuration BPDUs received on this SAP.
inMultipleSpanningTreeBpdus	long	sapTlsStpInMstBpdus	The value of the object sapTlsStpInMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs received on this SAP.
inRapidSpanningTreeBpdus	long	sapTlsStpInRstBpdus	The value of the object sapTlsStpInRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs received on this SAP.
inTcnBpdus	long	sapTlsStpInTcnBpdus	The value of the object sapTlsStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this SAP.
outConfigBpdus	long	sapTlsStpOutConfigBpdus	The value of the object sapTlsStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this SAP.
outMultipleSpanningTreeBpdus	long	sapTlsStpOutMstBpdus	The value of the object sapTlsStpOutMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs sent out on this SAP.
outRapidSpanningTreeBpdus	long	sapTlsStpOutRstBpdus	The value of the object sapTlsStpOutRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs sent out on this SAP.
outTcnBpdus	long	sapTlsStpOutTcnBpdus	This object specifies the number of Topology Change Notification BPDUs sent out this SAP.
CircuitMrpInfoStats MIB table name: TIMETRA-SDP-MIB.sdpBindTlsMrpTable Monitored class: l2fwd.CircuitMrpInfo			
mrpDroppedPdus	long	sdpBindTlsMrpDroppedPdus	The value of sdpBindTlsMrpDroppedPdus indicates the number of dropped MRP packets on this SDP Bind.
mrpRxEmptyEvent	long	sdpBindTlsMrpRxEmptyEvent	The value of sdpBindTlsMrpRxEmptyEvent indicates the number of 'Empty' MRP events received on this SDP Bind.
mrpRxInEvent	long	sdpBindTlsMrpRxInEvent	The value of sdpBindTlsMrpRxInEvent indicates the number of 'In' MRP events received on this SDP Bind.
mrpRxJoinEmptyEvent	long	sdpBindTlsMrpRxJoinEmptyEvent	The value of sdpBindTlsMrpRxJoinEmptyEvent indicates the number of 'Join Empty' MRP events received on this SDP Bind.
mrpRxJoinInEvent	long	sdpBindTlsMrpRxJoinInEvent	The value of sdpBindTlsMrpRxJoinInEvent indicates the number of 'Join-In' MRP events received on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
mrpRxLeaveEvent	long	sdpBindTlsMrpRxLeaveEvent	The value of sdpBindTlsMrpRxLeaveEvent indicates the number of 'Leave' MRP events received on this SDP Bind.
mrpRxNewEvent	long	sdpBindTlsMrpRxNewEvent	The value of sdpBindTlsMrpRxNewEvent indicates the number of 'New' MRP events received on this SDP Bind.
mrpRxPdus	long	sdpBindTlsMrpRxPdus	The value of sdpBindTlsMrpRxPdus indicates the number of MRP packets received on this SDP Bind.
mrpTxEmptyEvent	long	sdpBindTlsMrpTxEmptyEvent	The value of sdpBindTlsMrpTxEmptyEvent indicates the number of 'Empty' MRP events transmitted on this SDP Bind.
mrpTxInEvent	long	sdpBindTlsMrpTxInEvent	The value of sdpBindTlsMrpTxInEvent indicates the number of 'In' MRP events transmitted on this SDP Bind.
mrpTxJoinEmptyEvent	long	sdpBindTlsMrpTxJoinEmptyEvent	The value of sdpBindTlsMrpTxJoinEmptyEvent indicates the number of 'Join Empty' MRP events transmitted on this SDP Bind.
mrpTxJoinInEvent	long	sdpBindTlsMrpTxJoinInEvent	The value of sdpBindTlsMrpTxJoinInEvent indicates the number of 'Join-In' MRP events transmitted on this SDP Bind.
mrpTxLeaveEvent	long	sdpBindTlsMrpTxLeaveEvent	The value of sdpBindTlsMrpTxLeaveEvent indicates the number of 'Leave' MRP events transmitted on this SDP Bind.
mrpTxNewEvent	long	sdpBindTlsMrpTxNewEvent	The value of sdpBindTlsMrpTxNewEvent indicates the number of 'New' MRP events transmitted on this SDP Bind.
mrpTxPdus	long	sdpBindTlsMrpTxPdus	The value of sdpBindTlsMrpTxPdus indicates the number of MRP packets transmitted on this SDP Bind.
CircuitStpStats MIB table name: TIMETRA-SDP-MIB.sdpBindTlsTable Monitored class: l2fwd.CircuitStp			
forwardTransitions	long	sdpBindTlsStpForwardTransitions	The value of the object sdpBindTlsStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.
inBadBpdus	long	sdpBindTlsStpInBadBpdus	The value of the object sdpBindTlsStpInBadBpdus indicates the number of bad BPDUs received on this SDP Bind.
inConfigBpdus	long	sdpBindTlsStpInConfigBpdus	The value of the object sdpBindTlsStpInConfigBpdus indicates the number of Configuration BPDUs received on this SDP Bind.
inRapidSpanningTreeBpdus	long	sdpBindTlsStpInRstBpdus	The value of the object sdpBindTlsStpInRstBpdus indicates the number of Rapid Spanning Tree (Rst) BPDUs received on this SDP.

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5620 SAM counter name	Type	MIB counter name	Description
inTcnBpdus	long	sdpBindTlsStpInTcnBpdus	The value of the object sdpBindTlsStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this SDP Bind.
outConfigBpdus	long	sdpBindTlsStpOutConfigBpdus	The value of the object sdpBindTlsStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this SDP Bind.
outRapidSpanningTreeBpdus	long	sdpBindTlsStpOutRstBpdus	The value of the object sdpBindTlsStpOutRstBpdus indicates the number of Rapid Spanning Tree (Rstp) BPDUs sent out on this SDP.
outTcnBpdus	long	sdpBindTlsStpOutTcnBpdus	The value of the object sdpBindTlsStpOutTcnBpdus indicates the number of Topology Change Notification BPDUs sent out this SDP Bind.
L2AccessInterfaceMrpInfoStats MIB table name: TIMETRA-SAP-MIB.sapTlsMrpTable Monitored class: l2fwd.L2AccessInterfaceMrpInfo			
mrpDroppedPdus	long	sapTlsMrpDroppedPdus	The value of sapTlsMrpDroppedPdus indicates the number of dropped MRP packets on this SAP.
mrpRxEmptyEvent	long	sapTlsMrpRxEmptyEvent	The value of sapTlsMrpRxEmptyEvent indicates the number of 'Empty' MRP events received on this SAP.
mrpRxInEvent	long	sapTlsMrpRxInEvent	The value of sapTlsMrpRxInEvent indicates the number of 'In' MRP events received on this SAP.
mrpRxJoinEmptyEvent	long	sapTlsMrpRxJoinEmptyEvent	The value of sapTlsMrpRxJoinEmptyEvent indicates the number of 'Join Empty' MRP events received on this SAP.
mrpRxJoinInEvent	long	sapTlsMrpRxJoinInEvent	The value of sapTlsMrpRxJoinInEvent indicates the number of 'Join-In' MRP events received on this SAP.
mrpRxLeaveEvent	long	sapTlsMrpRxLeaveEvent	The value of sapTlsMrpRxLeaveEvent indicates the number of 'Leave' MRP events received on this SAP.
mrpRxNewEvent	long	sapTlsMrpRxNewEvent	The value of sapTlsMrpRxNewEvent indicates the number of 'New' MRP events received on this SAP.
mrpRxPdus	long	sapTlsMrpRxPdus	The value of sapTlsMrpRxPdus indicates the number of MRP packets received on this SAP.
mrpTxEmptyEvent	long	sapTlsMrpTxEmptyEvent	The value of sapTlsMrpTxEmptyEvent indicates the number of 'Empty' MRP events transmitted on this SAP.
mrpTxInEvent	long	sapTlsMrpTxInEvent	The value of sapTlsMrpTxInEvent indicates the number of 'In' MRP events transmitted on this SAP.
mrpTxJoinEmptyEvent	long	sapTlsMrpTxJoinEmptyEvent	The value of sapTlsMrpTxJoinEmptyEvent indicates the number of 'Join Empty' MRP events transmitted on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
mrpTxJoinInEvent	long	sapTlsMrpTxJoinInEvent	The value of sapTlsMrpTxJoinInEvent indicates the number of 'Join-In' MRP events transmitted on this SAP.
mrpTxLeaveEvent	long	sapTlsMrpTxLeaveEvent	The value of sapTlsMrpTxLeaveEvent indicates the number of 'Leave' MRP events transmitted on this SAP.
mrpTxNewEvent	long	sapTlsMrpTxNewEvent	The value of sapTlsMrpTxNewEvent indicates the number of 'New' MRP events transmitted on this SAP.
mrpTxPdus	long	sapTlsMrpTxPdus	The value of sapTlsMrpTxPdus indicates the number of MRP packets transmitted on this SAP.
PipStpInfoStats MIB table name: TIMETRA-SERV-MIB.tlsPipInfoTable Monitored class: l2fwd.PipStpInfo			
pipStpForwardTransitions	long	tlsPipStpForwardTransitions	The value of the object tlsPipStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.
pipStpInBadBpdus	long	tlsPipStpInBadBpdus	This object specifies the number of bad BPDUs received on this PIP uplink.
pipStpInConfigBpdus	long	tlsPipStpInConfigBpdus	The value of the object tlsPipStpInConfigBpdus indicates the number of Configuration BPDUs received on this PIP uplink.
pipStpInMstBpdus	long	tlsPipStpInMstBpdus	The value of the object tlsPipStpInMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs received on this PIP uplink.
pipStpInRstBpdus	long	tlsPipStpInRstBpdus	The value of the object tlsPipStpInRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs received on this PIP uplink.
pipStpInTcnBpdus	long	tlsPipStpInTcnBpdus	The value of the object tlsPipStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this PIP uplink.
pipStpOutConfigBpdus	long	tlsPipStpOutConfigBpdus	The value of the object tlsPipStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this PIP uplink.
pipStpOutMstBpdus	long	tlsPipStpOutMstBpdus	The value of the object tlsPipStpOutMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs sent out on this PIP uplink.
pipStpOutRstBpdus	long	tlsPipStpOutRstBpdus	The value of the object tlsPipStpOutRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs sent out on this PIP uplink.
pipStpOutTcnBpdus	long	tlsPipStpOutTcnBpdus	This object specifies the number of Topology Change Notification BPDUs sent out this PIP uplink.

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5620 SAM counter name	Type	MIB counter name	Description
SiteFibStats MIB table name: TIMETRA-SERV-MIB.svcTlsInfoTable Monitored class: l2fwd.SiteFib			
entries	long	svcTlsFdbNumEntries	The value of the object svcTlsFdbNumEntries indicates the current number of entries in the FDB of this service.
provisionedSize	long	svcTlsFdbTableSize	The value of the object svcTlsFdbTableSize specifies the maximum number of learned and static entries allowed in the FDB of this service. The maximum value of svcTlsFdbTableSize is '511999', when the the value of TIMETRA-CHASSIS-MIB::tmnxChassisOper Mode is 'd'. The maximum value of svcTlsFdbTableSize is '196607', when the the value of TIMETRA-CHASSIS-MIB::tmnxChassisOper Mode is 'c'. In other cases, the maximum value of svcTlsFdbTableSize is '131071'. DEFVAL { 250 }.
staticEntries	long	svcTlsFdbNumStaticEntri es	The value of the object svcTlsFdbNumStaticEntries indicates the current number of static entries in the FDB of this service.
SiteStpStats MIB table name: TIMETRA-SERV-MIB.svcTlsInfoTable Monitored class: l2fwd.SiteStp			
timeSinceTopologyChange	long	svcTlsStpTimeSinceTopol ogyChange	The value of the object svcTlsStpTimeSinceTopologyChange indicates the time (in hundredths of a second) since the last time a topology change was detected by the Spanning Tree Protocol instance associated with this service.
topologyChanges	long	svcTlsStpTopologyChange s	The value of the object svcTlsStpTopologyChanges indicates the total number of topology changes detected by the Spanning Tree Protocol instance associated with this service since the management entity was last reset or initialized.

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Table E-14 lag statistics

5620 SAM counter name	Type	MIB counter name	Description
LagStats MIB table name: TIMETRA-LAG-MIB.tLagOperationTable Monitored class: lag.Interface			

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5620 SAM counter name	Type	MIB counter name	Description
portThresholdFalling	long	tLagPortThresholdFalling	counts the number of linkDown or dynamicCost events for the Link Aggregation Group caused by the number of physical ports being less than or equal to tLagPortThreshold value.
portThresholdRising	long	tLagPortThresholdRising	counts the number of linkUp or dynamicCost events for the Link Aggregation Group caused by the number of physical ports being greater than tLagPortThreshold value.
MultiChassisLagMemberStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcLagLagStatsTable Monitored classes: • lag.MultiChassisLagMember • multichassis.MultiChassisLagMember			
configPacketsReceived	long	tmnxMcLagLagStatsPktsRxConfig	The value of tmnxMcLagLagStatsPktsRxConfig indicates how many MC-Lag control packets of type lag config were received on this system from the peer for this lag.
configPacketsTransmitted	long	tmnxMcLagLagStatsPktsTxConfig	The value of tmnxMcLagLagStatsPktsTxConfig indicates how many MC-Lag control packets of type lag config were sent on this system to the peer for this lag.
failedPacketsTransmitted	long	tmnxMcLagLagStatsPktsTxFailed	The value of tmnxMcLagLagStatsPktsTxFailed indicates how many MC-Lag control packets failed to be transmitted on this system to the peer for this lag.
statePacketsReceived	long	tmnxMcLagLagStatsPktsRxState	The value of tmnxMcLagLagStatsPktsRxState indicates how many MC-Lag control packets of type lag state were received on this system from the peer for this lag.
statePacketsTransmitted	long	tmnxMcLagLagStatsPktsTxState	The value of tmnxMcLagLagStatsPktsTxState indicates how many MC-Lag control packets of type lag state were sent on this system to the peer for this lag.

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Table E-15 ldp statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpIfStatsTable Monitored class: ldp.Interface			
existingAdjacencies	long	vRtrLdpIfExistingAdjacencies	The value of vRtrLdpIfExistingAdjacencies gives a count of the total active adjacencies on this LDP interface or with this targeted peer.

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5620 SAM counter name	Type	MIB counter name	Description
LdpEgressStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpEgrStatisticsTable Monitored class: ldp.AccountingFecPrefix			
ldpInProfileOctetsFc0	UINT128	vRtrLdpInProfileOctetsFc0	The value of vRtrLdpInProfileOctetsFc0 indicates the number of in profile octets received for Forwarding Class 0.
ldpInProfileOctetsFc1	UINT128	vRtrLdpInProfileOctetsFc1	The value of vRtrLdpInProfileOctetsFc1 indicates the number of in profile octets received for Forwarding Class 1.
ldpInProfileOctetsFc2	UINT128	vRtrLdpInProfileOctetsFc2	The value of vRtrLdpInProfileOctetsFc2 indicates the number of in profile octets received for Forwarding Class 2.
ldpInProfileOctetsFc3	UINT128	vRtrLdpInProfileOctetsFc3	The value of vRtrLdpInProfileOctetsFc3 indicates the number of in profile octets received for Forwarding Class 3.
ldpInProfileOctetsFc4	UINT128	vRtrLdpInProfileOctetsFc4	The value of vRtrLdpInProfileOctetsFc4 indicates the number of in profile octets received for Forwarding Class 4.
ldpInProfileOctetsFc5	UINT128	vRtrLdpInProfileOctetsFc5	The value of vRtrLdpInProfileOctetsFc5 indicates the number of in profile octets received for Forwarding Class 5.
ldpInProfileOctetsFc6	UINT128	vRtrLdpInProfileOctetsFc6	The value of vRtrLdpInProfileOctetsFc6 indicates the number of in profile octets received for Forwarding Class 6.
ldpInProfileOctetsFc7	UINT128	vRtrLdpInProfileOctetsFc7	The value of vRtrLdpInProfileOctetsFc7 indicates the number of in profile octets received for Forwarding Class 7.
ldpInProfilePktsFc0	UINT128	vRtrLdpInProfilePktsFc0	The value of vRtrLdpInProfilePktsFc0 indicates the number of in profile packets received for Forwarding Class 0.
ldpInProfilePktsFc1	UINT128	vRtrLdpInProfilePktsFc1	The value of vRtrLdpInProfilePktsFc1 indicates the number of in profile packets received for Forwarding Class 1.
ldpInProfilePktsFc2	UINT128	vRtrLdpInProfilePktsFc2	The value of vRtrLdpInProfilePktsFc2 indicates the number of in profile packets received for Forwarding Class 2.
ldpInProfilePktsFc3	UINT128	vRtrLdpInProfilePktsFc3	The value of vRtrLdpInProfilePktsFc3 indicates the number of in profile packets received for Forwarding Class 3.
ldpInProfilePktsFc4	UINT128	vRtrLdpInProfilePktsFc4	The value of vRtrLdpInProfilePktsFc4 indicates the number of in profile packets received for Forwarding Class 4.
ldpInProfilePktsFc5	UINT128	vRtrLdpInProfilePktsFc5	The value of vRtrLdpInProfilePktsFc5 indicates the number of in profile packets received for Forwarding Class 5.
ldpInProfilePktsFc6	UINT128	vRtrLdpInProfilePktsFc6	The value of vRtrLdpInProfilePktsFc6 indicates the number of in profile packets received for Forwarding Class 6.
ldpInProfilePktsFc7	UINT128	vRtrLdpInProfilePktsFc7	The value of vRtrLdpInProfilePktsFc7 indicates the number of in profile packets received for Forwarding Class 7.

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5620 SAM counter name	Type	MIB counter name	Description
ldpOutOfProfOctetsFc0	UINT128	vRtrLdpOutOfProfOctetsFc0	The value of vRtrLdpOutOfProfOctetsFc0 indicates the number of out of profile octets received for Forwarding Class 0.
ldpOutOfProfOctetsFc1	UINT128	vRtrLdpOutOfProfOctetsFc1	The value of vRtrLdpOutOfProfOctetsFc1 indicates the number of out of profile octets received for Forwarding Class 1.
ldpOutOfProfOctetsFc2	UINT128	vRtrLdpOutOfProfOctetsFc2	The value of vRtrLdpOutOfProfOctetsFc2 indicates the number of out of profile octets received for Forwarding Class 2.
ldpOutOfProfOctetsFc3	UINT128	vRtrLdpOutOfProfOctetsFc3	The value of vRtrLdpOutOfProfOctetsFc3 indicates the number of out of profile octets received for Forwarding Class 3.
ldpOutOfProfOctetsFc4	UINT128	vRtrLdpOutOfProfOctetsFc4	The value of vRtrLdpOutOfProfOctetsFc4 indicates the number of out of profile octets received for Forwarding Class 4.
ldpOutOfProfOctetsFc5	UINT128	vRtrLdpOutOfProfOctetsFc5	The value of vRtrLdpOutOfProfOctetsFc5 indicates the number of out of profile octets received for Forwarding Class 5.
ldpOutOfProfOctetsFc6	UINT128	vRtrLdpOutOfProfOctetsFc6	The value of vRtrLdpOutOfProfOctetsFc6 indicates the number of out of profile octets received for Forwarding Class 6.
ldpOutOfProfOctetsFc7	UINT128	vRtrLdpOutOfProfOctetsFc7	The value of vRtrLdpOutOfProfOctetsFc7 indicates the number of out of profile octets received for Forwarding Class 7.
ldpOutOfProfPktsFc0	UINT128	vRtrLdpOutOfProfPktsFc0	The value of vRtrLdpOutOfProfPktsFc0 indicates the number of out of profile packets received for Forwarding Class 0.
ldpOutOfProfPktsFc1	UINT128	vRtrLdpOutOfProfPktsFc1	The value of vRtrLdpOutOfProfPktsFc1 indicates the number of out of profile packets received for Forwarding Class 1.
ldpOutOfProfPktsFc2	UINT128	vRtrLdpOutOfProfPktsFc2	The value of vRtrLdpOutOfProfPktsFc2 indicates the number of out of profile packets received for Forwarding Class 2.
ldpOutOfProfPktsFc3	UINT128	vRtrLdpOutOfProfPktsFc3	The value of vRtrLdpOutOfProfPktsFc3 indicates the number of out of profile packets received for Forwarding Class 3.
ldpOutOfProfPktsFc4	UINT128	vRtrLdpOutOfProfPktsFc4	The value of vRtrLdpOutOfProfPktsFc4 indicates the number of out of profile packets received for Forwarding Class 4.
ldpOutOfProfPktsFc5	UINT128	vRtrLdpOutOfProfPktsFc5	The value of vRtrLdpOutOfProfPktsFc5 indicates the number of out of profile packets received for Forwarding Class 5.
ldpOutOfProfPktsFc6	UINT128	vRtrLdpOutOfProfPktsFc6	The value of vRtrLdpOutOfProfPktsFc6 indicates the number of out of profile packets received for Forwarding Class 6.
ldpOutOfProfPktsFc7	UINT128	vRtrLdpOutOfProfPktsFc7	The value of vRtrLdpOutOfProfPktsFc7 indicates the number of out of profile packets received for Forwarding Class 7.
SessionStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpSessionStatsTable Monitored class: ldp.Session			

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5620 SAM counter name	Type	MIB counter name	Description
addressMessagesReceived	long	vRtrLdpSessStatsAddrIn	The value of vRtrLdpSessStatsAddrIn counts the number of Address Messages that have been received during this session.
addressMessagesSent	long	vRtrLdpSessStatsAddrOut	The value of vRtrLdpSessStatsAddrOut counts the number of Address Messages that have been sent during this session.
addressWithdrawMessagesReceived	long	vRtrLdpSessStatsAddrWithdrawIn	The value of vRtrLdpSessStatsAddrWithdrawIn counts the number of Address Withdraw Messages that have been received during this session.
addressWithdrawMessagesSent	long	vRtrLdpSessStatsAddrWithdrawOut	The value of vRtrLdpSessStatsAddrWithdrawOut counts the number of Address Withdraw Messages that have been sent during this session.
fecReceived	long	vRtrLdpSessStatsFECRecv	The value of vRtrLdpSessStatsFECRecv counts the number of FECs received for this session.
fecSent	long	vRtrLdpSessStatsFECSent	The value of vRtrLdpSessStatsFECSent counts the number of FECs sent for this session.
helloMessagesReceived	long	vRtrLdpSessStatsHelloIn	The value of vRtrLdpSessStatsHelloIn counts the number of Hello Messages that have been received during this session.
helloMessagesSent	long	vRtrLdpSessStatsHelloOut	The value of vRtrLdpSessStatsHelloOut counts the number of Hello Messages that have been sent during this session.
initMessagesReceived	long	vRtrLdpSessStatsInitIn	The value of vRtrLdpSessStatsInitIn counts the number of Init Messages that have been received during this session.
initMessagesSent	long	vRtrLdpSessStatsInitOut	The value of vRtrLdpSessStatsInitOut counts the number of Init Messages that have been sent during this session.
keepAliveMessagesReceived	long	vRtrLdpSessStatsKeepaliveIn	The value of vRtrLdpSessStatsKeepaliveIn counts the number of Keepalive Messages that have been received during this session.
keepAliveMessagesSent	long	vRtrLdpSessStatsKeepaliveOut	The value of vRtrLdpSessStatsKeepaliveOut counts the number of Keepalive Messages that have been sent during this session.
labelAbortsReceived	long	vRtrLdpSessStatsLabelAbortIn	The value of vRtrLdpSessStatsLabelAbortIn counts the number of Label Abort Messages that have been received during this session.
labelAbortsSent	long	vRtrLdpSessStatsLabelAbortOut	The value of vRtrLdpSessStatsLabelAbortOut counts the number of Label Abort Messages that have been sent during this session.

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5620 SAM counter name	Type	MIB counter name	Description
labelMappingsReceived	long	vRtrLdpSessStatsLabelMappingIn	The value of vRtrLdpSessStatsLabelMappingIn counts the number of Label Mapping Messages that have been received during this session.
labelMappingsSent	long	vRtrLdpSessStatsLabelMappingOut	The value of vRtrLdpSessStatsLabelMappingOut counts the number of Label Mapping Messages that have been sent during this session.
labelReleasesReceived	long	vRtrLdpSessStatsLabelReleaseIn	The value of vRtrLdpSessStatsLabelReleaseIn counts the number of Label Release Messages that have been received during this session.
labelReleasesSent	long	vRtrLdpSessStatsLabelReleaseOut	The value of vRtrLdpSessStatsLabelReleaseOut counts the number of Label Release Messages that have been sent during this session.
labelRequestsReceived	long	vRtrLdpSessStatsLabelRequestIn	The value of vRtrLdpSessStatsLabelRequestIn counts the number of Label Request Messages that have been received during this session.
labelRequestsSent	long	vRtrLdpSessStatsLabelRequestOut	The value of vRtrLdpSessStatsLabelRequestOut counts the number of Label Request Messages that have been sent during this session.
labelWithdrawsReceived	long	vRtrLdpSessStatsLabelWithdrawIn	The value of vRtrLdpSessStatsLabelWithdrawIn counts the number of Label Withdraw Messages that have been received during this session.
labelWithdrawsSent	long	vRtrLdpSessStatsLabelWithdrawOut	The value of vRtrLdpSessStatsLabelWithdrawOut counts the number of Label Withdraw Messages that have been sent during this session.
linkAdjacencies	long	vRtrLdpSessStatsLinkAdj	The value of vRtrLdpSessStatsLinkAdj specifies the number of link adjacencies for this session.
notificationMessagesReceived	long	vRtrLdpSessStatsNotificationIn	The value of vRtrLdpSessStatsNotificationIn counts the number of Notification Messages that have been received during this session.
notificationMessagesSent	long	vRtrLdpSessStatsNotificationOut	The value of vRtrLdpSessStatsNotificationOut counts the number of Notification Messages that have been sent during this session.
targetedAdjacencies	long	vRtrLdpSessStatsTargAdj	The value of vRtrLdpSessStatsTargAdj specifies the number of targeted adjacencies for this session.
SiteStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpStatsTable Monitored class: ldp.Site			

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5620 SAM counter name	Type	MIB counter name	Description
activeAdjacencies	long	vRtrLdpStatsActiveAdjacencies	The value of vRtrLdpStatsActiveAdjacencies specifies the number of active adjacencies (i.e. established sessions) associated with the LDP instance.
activeInterfaces	long	vRtrLdpStatsActiveInterfaces	The value of vRtrLdpStatsActiveInterfaces specifies the number of active (i.e. operationally up) interfaces associated with the LDP instance.
activeSessions	long	vRtrLdpStatsActiveSessions	The value of vRtrLdpStatsActiveSessions specifies the number of active sessions (i.e. session in some form of creation) associated with the LDP instance.
activeTargetedSessions	long	vRtrLdpStatsActiveTargSessions	The value of vRtrLdpStatsActiveTargSessions specifies the number of active (i.e. operationally up) targeted sessions associated with the LDP instance.
addressFECsReceived	long	vRtrLdpStatsAddrFECRecv	The value of vRtrLdpStatsAddrFECRecv specifies the number of Address FECs received by the LDP instance from its neighbors.
addressFECsSent	long	vRtrLdpStatsAddrFECSent	The value of vRtrLdpStatsAddrFECSent specifies the number of Address FECs sent by the LDP instance to its neighbors.
attemptedSessions	long	vRtrLdpStatsAttemptedSessions	The value of vRtrLdpStatsAttemptedSessions specifies the total number of attempted sessions for this LDP instance.
badLdpIdentifierErrors	long	vRtrLdpStatsBadLdpIdentifierErrors	The value of vRtrLdpStatsBadLdpIdentifierErrors gives the number of Bad LDP Identifier Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badMessageLengthErrors	long	vRtrLdpStatsBadMessageLengthErrors	The value of vRtrLdpStatsBadMessageLengthErrors gives the number of Bad Message Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badPduLengthErrors	long	vRtrLdpStatsBadPduLengthErrors	The value of vRtrLdpStatsBadPduLengthErrors gives the number of Bad Pdu Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badTlvLengthErrors	long	vRtrLdpStatsBadTlvLengthErrors	The value of vRtrLdpStatsBadTlvLengthErrors gives the number of Bad TLV Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.

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5620 SAM counter name	Type	MIB counter name	Description
inactiveInterfaces	long	vRtrLdpStatsInactiveInterfaces	The value of vRtrLdpStatsInactiveInterfaces specifies the number of inactive (i.e. operationally down) interfaces associated with the LDP instance.
inactiveTargetedSessions	long	vRtrLdpStatsInactiveTargSessions	The value of vRtrLdpStatsInactiveTargSessions specifies the number of inactive (i.e. operationally down) targeted sessions associated with the LDP instance.
keepAliveExpiredErrors	long	vRtrLdpStatsKeepAliveExpiredErrors	The value of vRtrLdpStatsKeepAliveExpiredErrors gives the number of Session Keep Alive Timer Expired Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
malformedTlvValueErrors	long	vRtrLdpStatsMalformedTlvValueErrors	The value of vRtrLdpStatsMalformedTlvValueErrors gives the number of Malformed TLV Value Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
operDownEvents	long	vRtrLdpStatsOperDownEvents	The value of vRtrLdpStatsOperDownEvents specifies the number of times the LDP instance has gone operationally down since the instance was created.
serviceFECsReceived	long	vRtrLdpStatsSvcFECRecv	The value of vRtrLdpStatsSvcFECRecv specifies the number of Service FECs received by the LDP instance from its neighbors.
serviceFECsSent	long	vRtrLdpStatsSvcFECSent	The value of vRtrLdpStatsSvcFECSent specifies the number of Service FECs sent by the LDP instance to its neighbors.
sessionRejectedAdvertisementModeErrors	long	vRtrLdpStatsSessRejAdvErrors	The value of vRtrLdpStatsSessRejAdvErrors gives the total number of Session Rejected/Parameters Advertisement Mode Error Notification Messages sent or received by this LDP instance.
sessionRejectedLabelRangeErrors	long	vRtrLdpStatsSessRejLabelRangeErrors	The value of vRtrLdpStatsSessRejLabelRangeErrors gives the total number of Session Rejected/Parameters Label Range Error Notification Messages sent or received by this LDP instance.
sessionRejectedMaxPduLengthErrors	long	vRtrLdpStatsSessRejMaxPduErrors	The value of vRtrLdpStatsSessRejMaxPduErrors gives the total number of Session Rejected/Parameters Max Pdu Length Error Notification Messages sent or received by this LDP instance.

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5620 SAM counter name	Type	MIB counter name	Description
sessionRejectedNoHelloErrors	long	vRtrLdpStatsSessRejNoHelloErrors	The value of vRtrLdpStatsSessRejNoHelloErrors gives the total number of Session Rejected/No Hello Error Notification Messages sent or received by this LDP instance.
shutdownNotificationsReceived	long	vRtrLdpStatsShutdownNotifRecv	The value of vRtrLdpStatsShutdownNotifRecv gives the number of Shutdown Notifications received related to sessions associated with this LDP instance.
shutdownNotificationsSent	long	vRtrLdpStatsShutdownNotifSent	The value of vRtrLdpStatsShutdownNotifSent gives the number of Shutdown Notifications sent related to sessions associated with this LDP instance.
TargetedPeerStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpIfStatsTable Monitored class: ldp.TargetedPeer			
existingAdjacencies	long	vRtrLdpIfExistingAdjacencies	The value of vRtrLdpIfExistingAdjacencies gives a count of the total active adjacencies on this LDP interface or with this targeted peer.

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Table E-16 lldp statistics

5620 SAM counter name	Type	MIB counter name	Description
LLDPRxPortStats MIB table name: TIMETRA-LLDP-MIB.tmnxLldpStatsRxPortTable Monitored class: lldp.LLDPPortConfiguration			

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5620 SAM counter name	Type	MIB counter name	Description
lldpStatsRxPortAgeouts	long	tmnxLldpStatsRxPortAgeouts	The counter that represents the number of age-outs that occurred on a given port. An age-out is the number of times the complete set of information advertised by a particular MSAP has been deleted from tables contained in tmnxLldpRemoteSystemsData and lldpExtensions objects because the information timeliness interval has expired. This counter is similar to lldpStatsRemTablesAgeouts, except that the counter is on a per port basis. This enables NMS to poll tables associated with the tmnxLldpRemoteSystemsData objects and all LLDP extension objects associated with remote systems on the indicated port only. This counter should be set to zero during agent initialization and its value should not be saved in non-volatile storage. When a port's admin status changes from 'disabled' to 'rxOnly', 'txOnly' or 'txAndRx', the counter associated with the same port should reset to 0. The agent should also flush all remote system information associated with the same port. This counter should be incremented only once when the complete set of information is invalidated (aged out) from all related tables on a particular port. Partial ageing is not allowed, and thus, should not change the value of this counter. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortFrameDiscard	long	tmnxLldpStatsRxPortFrameDiscard	The number of LLDP frames received by this LLDP agent on the indicated port, and then discarded for any reason. This counter can provide an indication that LLDP header formating problems may exist with the local LLDP agent in the sending system or that LLDPDU validation problems may exist with the local LLDP agent in the receiving system. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortFrameErrs	long	tmnxLldpStatsRxPortFrameErrs	The number of invalid LLDP frames received by this LLDP agent on the indicated port, while this LLDP agent is enabled. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortFrames	long	tmnxLldpStatsRxPortFrames	The number of valid LLDP frames received by this LLDP agent on the indicated port, while this LLDP agent is enabled. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortTLVDiscard	long	tmnxLldpStatsRxPortTLVDiscard	The number of LLDP TLVs discarded for any reason by this LLDP agent on the indicated port. REFERENCE IEEE Std 802.1AB-200X 10.5.2.

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5620 SAM counter name	Type	MIB counter name	Description
lldpStatsRxPortTLVUnknown	long	tmnxLldpStatsRxPortTLVUnknown	The number of LLDP TLVs received on the given port that are not recognized by this LLDP agent on the indicated port. An unrecognized TLV is referred to as the TLV whose type value is in the range of reserved TLV types (000 1001 - 111 1110) in Table 9.1 of IEEE Std 802.1AB-2004. An unrecognized TLV may be a basic management TLV from a later LLDP version. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
LLDPTxPortStats MIB table name: TIMETRA-LLDP-MIB.tmnxLldpStatsTxPortTable Monitored class: lldp.LLDPPortConfiguration			
lldpStatsTxLLDPDULengthErrs	long	tmnxLldpStatsTxLLDPDULengthErrs	The number of LLDPD Length Errors recorded for the Port. REFERENCE IEEE Std 802.1AB-200X 10.2.7.2.
lldpStatsTxPortFrames	long	tmnxLldpStatsTxPortFrames	The number of LLDP frames transmitted by this LLDP agent on the indicated port. REFERENCE IEEE Std 802.1AB-200X 10.5.2.

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Table E-17 mpls statistics

5620 SAM counter name	Type	MIB counter name	Description
DynamicLspStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatTable Monitored class: mpls.DynamicLsp			
configuredPaths	long	vRtrMplsLspConfiguredPaths	The number of paths configured for this LSP.
operationalPaths	long	vRtrMplsLspOperationalPaths	The number of operational paths for this LSP. This includes the path currently active, as well as operational standby paths.
pathChanges	long	vRtrMplsLspPathChanges	The number of path changes this LSP has had. For every path change (path down, path up, path change), a corresponding syslog/trap (if enabled) is generated for it.
standbyPaths	long	vRtrMplsLspStandbyPaths	The number of standby paths configured for this LSP.
timeSinceLastPathChange	long	vRtrMplsLspLastPathChange	The time in 10-millisecond units since the last change occurred on this LSP.
timeSinceLastPrimaryUpState	long	vRtrMplsLspPrimaryTimeUp	The total time in 10-millisecond units that this LSP's primary path has been operational. For example, the percentage contribution of the primary path to the operational time is given by (vRtrMplsLspPrimaryTimeUp/vRtrMplsLspTimeUp * 100) .

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5620 SAM counter name	Type	MIB counter name	Description
LspPathStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspPathStatTable Monitored class: mpls.LspPath			
cspfQueries	long	vRtrMplsLspPathCspfQueries	The value of vRtrMplsLspPathCspfQueries specifies the number of CSPF queries that have been made for this LSP path.
retryAttempts	long	vRtrMplsLspPathRetryAttempts	The number of unsuccessful attempts which have been made to signal this path. As soon as the path gets signalled, this is set to 0.
timeDown	long	vRtrMplsLspPathTimeDown	The total time in 10-millisecond units that this LSP Path has not been operational.
timeUp	long	vRtrMplsLspPathTimeUp	The total time in 10-millisecond units that this LSP path has been operational. For example, the percentage up time can be determined by computing (vRtrMplsLspPathTimeUp/vRtrMplsLspAge * 100).
transitionCount	long	vRtrMplsLspPathTransitionCount	The object vRtrMplsLspPathTransitionCount maintains the number of transitions that have occurred for this LSP.
LspStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatTable Monitored classes: • mpls.DynamicLsp • mpls.StaticLsp • mpls.BypassOnlyLsp			
age	long	vRtrMplsLspAge	The age (i.e., time from creation till now) of this LSP in 10-millisecond periods.
timeSinceLastDownState	long	vRtrMplsLspTimeDown	The total time in 10-millisecond units that this LSP has not been operational.
timeSinceLastTransition	long	vRtrMplsLspLastTransition	The time in 10-millisecond units since the last transition occurred on this LSP.
timeSinceLastUpState	long	vRtrMplsLspTimeUp	The total time in 10-millisecond units that this LSP has been been operational. For example, the percentage up time can be determined by computing (vRtrMplsLspTimeUp/vRtrMplsLspAge * 100).
transitions	long	vRtrMplsLspTransitions	The number of state transitions (up -> down and down -> up) this LSP has undergone.
MplsInterfaceStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsIfStatTable Monitored class: mpls.Interface			
receiveOctets	UINT128	vRtrMplsIfRxOctetCount	The total number of bytes in MPLS labeled packets received on this interface.
receivePackets	UINT128	vRtrMplsIfRxPktCount	The total number of MPLS labeled packets received on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
transmitOctets	UINT128	vRtrMplsIfTxOctetCount	The total number of bytes in MPLS labeled packets transmitted on this interface.
transmitPackets	UINT128	vRtrMplsIfTxPktCount	The total number of MPLS labeled packets transmitted from this interface.
MplsLspEgressStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatisticsTable Monitored class: mpls.DynamicLsp			
psbMatch	boolean	vRtrMplsLspStatsPSBMatch	The value of vRtrMplsLspStatsPSBMatch indicates if a path state block (PSB) match was made against this LSP name.
MplsLspIngressStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatisticsTable Monitored class: mpls.IngStatsPolicy			
psbMatch	boolean	vRtrMplsLspStatsPSBMatch	The value of vRtrMplsLspStatsPSBMatch indicates if a path state block (PSB) match was made against this LSP name.
SiteStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsGeneralStatTable Monitored class: mpls.Site			
detourOriginate	long	vRtrMplsGeneralDetourLspOriginate	The value of vRtrMplsGeneralDetourLspOriginate indicates the number of detour LSPs that originate at this virtual router.
detourTerminate	long	vRtrMplsGeneralDetourLspTerminate	The value of vRtrMplsGeneralDetourLspTerminate indicates the number of detour LSPs that terminate at this virtual router.
detourTransit	long	vRtrMplsGeneralDetourLspTransit	The value of vRtrMplsGeneralDetourLspTransit indicates the number of detour LSPs that transit through this virtual router.
dynamicOriginate	long	vRtrMplsGeneralDynamicLspOriginate	The value of vRtrMplsGeneralDynamicLspOriginate indicates the number of dynamic LSPs that originate at this virtual router.
dynamicTerminate	long	vRtrMplsGeneralDynamicLspTerminate	The value of vRtrMplsGeneralDynamicLspTerminate indicates the number of dynamic LSPs that terminate at this virtual router.
dynamicTransit	long	vRtrMplsGeneralDynamicLspTransit	The value of vRtrMplsGeneralDynamicLspTransit indicates the number of dynamic LSPs that transit through this virtual router.
staticOriginate	long	vRtrMplsGeneralStaticLspOriginate	The value of vRtrMplsGeneralStaticLspOriginate indicates the number of static LSPs that originate at this virtual router.
staticTerminate	long	vRtrMplsGeneralStaticLspTerminate	The value of vRtrMplsGeneralStaticLspTerminate indicates the number of static LSPs that terminate at this virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
staticTransit	long	vRtrMplsGeneralStaticLspTransit	The value of vRtrMplsGeneralStaticLspTransit indicates the number of static LSPs that transit through this virtual router.

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Table E-18 multicast statistics

5620 SAM counter name	Type	MIB counter name	Description
McastCacChannelServiceStats MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacServStatsTable Monitored class: multicast.McastCacPolicy			
action	int	tmnxMcacServStatsAction	The value of tmnxMcacServStatsAction indicates the action specified by the mcac policy for the service application to act upon.
algorithmReapply	boolean	tmnxMcacServStatsAlgoReapply	The value of tmnxMcacServStatsAlgoReapply indicates if the mcac policy was reapplied on the already accepted channel due lag constraints or if this was the first request for this channel from the service application.
bundleAvailBw	long	tmnxMcacServStatsBundleAvailBW	The value of tmnxMcacServStatsBundleAvailBW indicates the available bundle bandwidth after the requested channel was either accepted or discarded by the mcac policy.
channelBw	long	tmnxMcacServStatsChannelBW	The value of tmnxMcacServStatsChannelBW indicates the channel bandwidth configured at the mcac policy at the time of request from the service application.
channelRequestCount	long	tmnxMcacServStatsApplyAttempts	The value of tmnxMcacServStatsApplyAttempts indicates the number of times the mcac policy was applied for a particular channel entry by the service application.
channelType	int	tmnxMcacServStatsChannelType	The value of tmnxMcacServStatsChannelType indicates the channel type configured at the mcac policy at the time of request from the service application.
encapValueOrVCId	String	tmnxMcacServStatsEncapValue	The value of tmnxMcacServStatsEncapValue indicates the SAP/SDP Encap value of which the mcac policy is applied.
interfaceAvailBw	long	tmnxMcacServStatsIntfAvailBW	The value of tmnxMcacServStatsIntfAvailBW indicates the available interface bandwidth after the requested channel was either accepted or discarded by the mcac policy.

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5620 SAM counter name	Type	MIB counter name	Description
portIdOrTunnelId	String	tmnxMcacServStatsPortId	The value of tmnxMcacServStatsPortId indicates the port Id of the SAP/SDP on which the mcac policy is applied.
reason	int	tmnxMcacServStatsReason	The value of tmnxMcacServStatsReason indicates the reason for the action specified by the mcac policy for the service application to act upon.
timeStamp	long	tmnxMcacServStatsTimeStamp	The value of tmnxMcacServStatsTimeStamp indicates the timestamp of the last time the mcac policy was applied for this channel entry.
McastCacChannelStats MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacStatsTable Monitored class: multicast.McastCacPolicy			
action	int	tmnxMcacStatsAction	The value of tmnxMcacStatsAction indicates the action specified by the mcac policy for the application interface to act upon.
algorithmReapply	boolean	tmnxMcacStatsAlgoReapply	The value of tmnxMcacStatsAlgoReapply indicates if the mcac policy was reapplied on the already accepted channel due lag constraints or if this was the first request for this channel from the application.
bundleAvailBw	long	tmnxMcacStatsBundleAvailBW	The value of tmnxMcacStatsBundleAvailBW indicates the available bundle bandwidth after the requested channel was either accepted or discarded by the mcac policy.
bundleName	String	tmnxMcacStatsBundleName	The value of tmnxMcacStatsBundleName indicates the name of the multicast CAC policy bundle. The value of tmnxMcacStatsBundleName could be an empty string, meaning that this particular statistics entry's channel did not belong to any bundle in the policy.
channelAddress	String	tmnxMcacStatsChlAddr	The value of tmnxMcacStatsChlAddr indicates the address of the multicast channel that mcac policy was applied upon when requested by the application interface. Address type is indicated by tmnxMcacStatsChlAddrType.
channelAddressType	int	tmnxMcacStatsChlAddrType	The value of tmnxMcacStatsChlAddrType indicates the address type of tmnxMcacStatsChlAddr.
channelBw	long	tmnxMcacStatsChannelBW	The value of tmnxMcacStatsChannelBW indicates the channel bandwidth configured at the mcac policy at the time of request from the application interface.
channelRequestCount	long	tmnxMcacStatsApplyAttempts	The value of tmnxMcacStatsApplyAttempts indicates the number of times the mcac policy was applied for a particular channel entry by the application.

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5620 SAM counter name	Type	MIB counter name	Description
channelType	int	tmnxMcacStatsChannelType	The value of tmnxMcacStatsChannelType indicates the channel type configured at the mcac policy at the time of request from the application interface.
interfaceAvailBw	long	tmnxMcacStatsIntfAvailBW	The value of tmnxMcacStatsIntfAvailBW indicates the available interface bandwidth after the requested channel was either accepted or discarded by the mcac policy.
interfaceId	long	tmnxMcacStatsIfIndex	The value of tmnxMcacStatsIfIndex indicates the application interface index that has applied mcac policy.
protocolName	int	tmnxMcacStatsProtocolIndex	The value of tmnxMcacStatsProtocolIndex indicates the application that has applied mcac policy.
reason	int	tmnxMcacStatsReason	The value of tmnxMcacStatsReason indicates the reason for the action specified by the mcac policy for the application interface to act upon.
timeStamp	long	tmnxMcacStatsTimeStamp	The value of tmnxMcacStatsTimeStamp indicates the timestamp of the last time the mcac policy was applied for this channel entry.
McastCacOper MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacOperTable Monitored class: multicast.McastCacPolicy			
activeChannels	long	tmnxMcacOperActiveChannels	The value of tmnxMcacOperActiveChannels indicates the number of active channels for this entry.
availMandBw	long	tmnxMcacOperAvailMandBw	The value of tmnxMcacOperAvailMandBw indicates the operational pre-reserved bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this protocol interface instance.
availOptionalBw	long	tmnxMcacOperAvailOptnlBw	The value of tmnxMcacOperAvailOptnlBw indicates the operational available bandwidth in kilo-bits per second(kbps) on the bundle for this protocol interface instance.
currConstrtLvl	long	tmnxMcacOperCurrConstrtLvl	The value of tmnxMcacOperCurrConstrtLvl indicates the current lag constraints bundle level id for the number of ports down (tmnxMcacOperPortsDown). This value is used to index the table tmnxMcacLevelTable to get the bundle level bandwidth.
inUseMandBw	long	tmnxMcacOperInUseMandBw	The value of tmnxMcacOperInUseMandBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this protocol interface instance.

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5620 SAM counter name	Type	MIB counter name	Description
inUseOptionalBw	long	tmnxMcacOperInUseOptnlBw	The value of tmnxMcacOperInUseOptnlBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the optional channels on the bundle for this protocol interface instance.
maxBw	long	tmnxMcacOperMaxBw	The value of tmnxMcacOperMaxBw indicates the operational maximum bandwidth in kilo-bits per second(kbps) on the bundle for this protocol interface instance.
portsDown	long	tmnxMcacOperPortsDown	The value of tmnxMcacOperPortsDown indicates the the number of ports down on the application interface. This value is used to index the table tmnxMcacLagTable to get the bundle level id.
valuesInTransit	boolean	tmnxMcacOperValuesInTransit	The value of tmnxMcacOperValuesInTransit indicates that the operational (available and in-use mandatory/optional) value for the following objects are in transition due to configuration change: tmnxMcacOperAvailOptnlBw tmnxMcacOperAvailMandBw tmnxMcacOperInUseMandBw tmnxMcacOperInUseOptnlBw When Multicast CAC Policy is applied on the interface for the join of the next channel, the operational values will be recalculated and applied to the above objects and the value for tmnxMcacOperValuesInTransit will be set to 'false'. If the value of tmnxMcacOperValuesInTransit is 'true' then the values are in transition.
McastCacServOperStats MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacServOperTable Monitored class: multicast.McastCacPolicy			
activeChannels	long	tmnxMcacServOperActiveChannels	The value of tmnxMcacServOperActiveChannels indicates the number of active channels for this entry.
availMandBw	long	tmnxMcacServOperAvailMandBw	The value of tmnxMcacServOperAvailMandBw indicates the operational pre-reserved bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this service application on sap/sdp instance.
availOptionalBw	long	tmnxMcacServOperAvailOptnlBw	The value of tmnxMcacServOperAvailOptnlBw indicates the operational available bandwidth in kilo-bits per second(kbps) on the bundle for this service application on sap/sdp instance.

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5620 SAM counter name	Type	MIB counter name	Description
currConstrtLvl	long	tmnxMcacServOperCurrConstrtLvl	The value of tmnxMcacServOperCurrConstrtLvl indicates the current lag constraints bundle level id for the number of ports down (tmnxMcacServOperPortsDown). This value is used to index the table tmnxMcacLevelTable to get the bundle level bandwidth.
inUseMandBw	long	tmnxMcacServOperInUseMandBw	The value of tmnxMcacServOperInUseMandBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this service application on sap/sdp instance.
inUseOptionalBw	long	tmnxMcacServOperInUseOptnlBw	The value of tmnxMcacServOperInUseOptnlBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the optional channels on the bundle for this service application on sap/sdp instance.
maxBw	long	tmnxMcacServOperMaxBw	The value of tmnxMcacServOperMaxBw indicates the operational maximum bandwidth in kilo-bits per second(kbps) on the bundle for this service application on sap/sdp instance.
portsDown	long	tmnxMcacServOperPortsDown	The value of tmnxMcacServOperPortsDown indicates the the number of ports down on the service application on sap/sdp. This value is used to index the table tmnxMcacLagTable to get the bundle level id.
valuesInTransit	boolean	tmnxMcacServOperValuesInTransit	The value of tmnxMcacServOperValuesInTransit indicates that the operational (available and in-use mandatory/optional) value for the following objects are in transition due to configuration change: tmnxMcacServOperAvailOptnlBw tmnxMcacServOperAvailMandBw tmnxMcacServOperInUseMandBw tmnxMcacServOperInUseOptnlBw When Multicast CAC Policy is applied on the sap/sdp for the join of the next channel, the operational values will be recalculated and applied to the above objects and the value for tmnxMcacServOperValuesInTransit will be set to 'false'. If the value of tmnxMcacServOperValuesInTransit is 'true' then the values are in transition.

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Table E-19 multichassis statistics

5620 SAM counter name	Type	MIB counter name	Description
MultiChassisPeerRingStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcrPeerStatsTable Monitored class: multichassis.Peer			
keepAlivePacketsTransmitted	long	tmnxMcrPeerStatsTxKeepAlive	The value of tmnxMcrPeerStatsTxKeepAlive indicates how many valid MC-Ring control packets of type 'keepalive' were transmitted to the peer.
mcsIdRequestPacketsReceived	long	tmnxMcrPeerStatsRxMcsIdReq	The value of tmnxMcrPeerStatsRxMcsIdReq indicates how many valid MCS ID requests were received from the peer.
mcsIdRequestPacketsTransmitted	long	tmnxMcrPeerStatsTxMcsIdReq	The value of tmnxMcrPeerStatsTxMcsIdReq indicates how many valid MCS ID requests were transmitted to the peer.
mcsIdResponsePacketsReceived	long	tmnxMcrPeerStatsRxMcsIdRsp	The value of tmnxMcrPeerStatsRxMcsIdRsp indicates how many valid MCS ID responses were received from the peer.
mcsIdResponsePacketsTransmitted	long	tmnxMcrPeerStatsTxMcsIdRsp	The value of tmnxMcrPeerStatsTxMcsIdRsp indicates how many valid MCS ID responses were transmitted to the peer.
ringExistsRequestPacketsReceived	long	tmnxMcrPeerStatsRxRingExistsReq	The value of tmnxMcrPeerStatsRxRingExistsReq indicates how many valid 'ring exists' requests were received from the peer.
ringExistsRequestPacketsTransmitted	long	tmnxMcrPeerStatsTxRingExistsReq	The value of tmnxMcrPeerStatsTxRingExistsReq indicates how many valid 'ring exists' requests were transmitted to the peer.
ringExistsResponsePacketsReceived	long	tmnxMcrPeerStatsRxRingExistsRsp	The value of tmnxMcrPeerStatsRxRingExistsRsp indicates how many valid 'ring exists' responses were received from the peer.
ringExistsResponsePacketsTransmitted	long	tmnxMcrPeerStatsTxRingExistsRsp	The value of tmnxMcrPeerStatsTxRingExistsRsp indicates how many valid 'ring exists' responses were transmitted to the peer.
ringKeepAlivePacketsReceived	long	tmnxMcrPeerStatsRxKeepAlive	The value of tmnxMcrPeerStatsRxKeepAlive indicates how many valid MC-Ring control packets of type 'keepalive' were received from the peer.
ringSignallingPacketsReceived	long	tmnxMcrPeerStatsRx	The value of tmnxMcrPeerStatsRx indicates how many valid MC-Ring signalling messages were received from the peer.
ringSignallingPacketsTransmitted	long	tmnxMcrPeerStatsTx	The value of tmnxMcrPeerStatsTx indicates how many valid MC-Ring signalling messages were transmitted to the peer.

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5620 SAM counter name	Type	MIB counter name	Description
MultiChassisRingNodeStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcrRingNodeStatsTable Monitored class: multichassis.MultiChassisRingNode			
detectedPacketsAcknowledged	long	tmnxMcrRingNodeStatsTxDetectAck	The value of tmnxMcrRingNodeStatsTxDetectAck indicates how many valid 'detected ring node' signalling messages were acknowledged to the peer for this multi-chassis ring node.
detectedPacketsPeerAcknowledged	long	tmnxMcrRingNodeStatsRxDetectAck	The value of tmnxMcrRingNodeStatsRxDetectAck indicates how many valid 'detected ring node' signalling messages were acknowledged by the peer for this multi-chassis ring node.
detectedPacketsReceived	long	tmnxMcrRingNodeStatsRxDetect	The value of tmnxMcrRingNodeStatsRxDetect indicates how many valid 'detected ring node' signalling messages were received from the peer for this multi-chassis ring node.
detectedPacketsTransmitted	long	tmnxMcrRingNodeStatsTxDetect	The value of tmnxMcrRingNodeStatsTxDetect indicates how many valid 'detected ring node' signalling messages were transmitted to the peer for this multi-chassis ring node.
rncvPacketsReceived	long	tmnxMcrRingNodeStatsRncvRxResp	The value of tmnxMcrRingNodeStatsRncvRxResp indicates how many valid connectivity verification messages were received from this multi-chassis ring node.
rncvPacketsRoundTripTime	long	tmnxMcrRingNodeStatsRncvRtTime	The value of tmnxMcrRingNodeStatsRncvRtTime indicates the round-trip-time of the last successful connectivity verification for this multi-chassis ring node. If there has not been a successful connectivity verification, the value of tmnxMcrRingNodeStatsRncvRtTime is zero.
rncvPacketsTransmitted	long	tmnxMcrRingNodeStatsRncvTxReq	The value of tmnxMcrRingNodeStatsRncvTxReq indicates how many valid connectivity verification messages were transmitted to this multi-chassis ring node.
MultiChassisRingStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcrRingStatsTable Monitored class: multichassis.MultiChassisRing			
opaquePacketsReceivedDelivered	long	tmnxMcrRingStatsRxOpaqueDelivrd	The value of tmnxMcrRingStatsRxOpaqueDelivrd indicates how many valid opaque signalling messages were received from the peer and delivered for this multi-chassis ring.

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5620 SAM counter name	Type	MIB counter name	Description
opaquePacketsReceivedNoDestination	long	tmnxMcrRingStatsRxOpaqueNoDest	The value of tmnxMcrRingStatsRxOpaqueNoDest indicates how many valid opaque signalling messages were received from the peer and for which no destination could be found.
opaquePacketsTransmitted	long	tmnxMcrRingStatsTxOpaque	The value of tmnxMcrRingStatsTxOpaque indicates how many valid opaque signalling messages were transmitted to the peer for this multi-chassis ring.
sapsChangedPacketsReceived	long	tmnxMcrRingStatsRxSapsChanged	The value of tmnxMcrRingStatsRxSapsChanged indicates how many valid 'SAPs changed info' signalling messages were received from the peer for this multi-chassis ring.
sapsChangedPacketsTransmitted	long	tmnxMcrRingStatsTxSapsChanged	The value of tmnxMcrRingStatsTxSapsChanged indicates how many valid 'SAPs changed info' signalling messages were transmitted to the peer for this multi-chassis ring.
PeerStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcLagPeerStatsTable Monitored class: multichassis.Peer			
configPacketsReceived	long	tmnxMcLagPeerStatsPktsRxConfig	The value of tmnxMcLagPeerStatsPktsRxConfig indicates how many valid MC-Lag control packets of type lag config were received on this system from the peer.
failedMD5AuthenticationPacketsDropped	long	tmnxMcLagPeerStatsDropMD5	The value of tmnxMcLagPeerStatsDropMD5 indicates how many MC-Lag control packets were dropped on this system from the peer because the packet failed MD5 authentication.
failedPacketsTransmitted	long	tmnxMcLagPeerStatsPktsTxFailed	The value of tmnxMcLagPeerStatsPktsTxFailed indicates how many MC-Lag control packets failed to be transmitted from this system to the peer.
invalidLagIdPacketsDropped	long	tmnxMcLagPeerStatsDropTlvInvldId	The value of tmnxMcLagPeerStatsDropTlvInvldId indicates how many MC-Lag control packets were dropped on this system from the peer because the packet referred to an invalid or non multi-chassis lag.
invalidSizePacketsDropped	long	tmnxMcLagPeerStatsDropTlvInvldSz	The value of tmnxMcLagPeerStatsDropTlvInvldSz indicates how many MC-Lag control packets were dropped on this system from the peer because the packet size was invalid.
keepAlivePacketsReceived	long	tmnxMcLagPeerStatsPktsRxKpalive	The value of tmnxMcLagPeerStatsPktsRxKpalive indicates how many valid MC-Lag control packets of type keepalive were received on this system from the peer.

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5620 SAM counter name	Type	MIB counter name	Description
keepalivePacketsTransmitted	long	tmnxMcLagPeerStatsPktsTxKpalive	The value of tmnxMcLagPeerStatsPktsTxKpalive indicates how many MC-Lag control packets of type keepalive were transmitted from this system to the peer.
outOfSequencePacketsDropped	long	tmnxMcLagPeerStatsDropOutOfSeq	The value of tmnxMcLagPeerStatsDropOutOfSeq indicates how many MC-Lag control packets were dropped on this system from the peer because the packet was out of sequence.
packetsReceived	long	tmnxMcLagPeerStatsPktsRx	The value of tmnxMcLagPeerStatsPktsRx indicates how many valid MC-Lag control packets were received on this system from the peer.
packetsTransmitted	long	tmnxMcLagPeerStatsPktsTx	The value of tmnxMcLagPeerStatsPktsTx indicates how many MC-Lag control packets were transmitted from this system to the peer.
peerConfigPacketsReceived	long	tmnxMcLagPeerStatsPktsRxPeerCfg	The value of tmnxMcLagPeerStatsPktsRxPeerCfg indicates how many valid MC-Lag control packets of type peer config were received on this system from the peer.
peerConfigPacketsTransmitted	long	tmnxMcLagPeerStatsPktsTxPeerCfg	The value of tmnxMcLagPeerStatsPktsTxPeerCfg indicates how many MC-Lag control packets of type peer config were transmitted from this system to the peer.
stateDisabledPacketsDropped	long	tmnxMcLagPeerStatsDropStateDsbld	The value of tmnxMcLagPeerStatsDropStateDsbld indicates how many MC-Lag control packets were dropped on this system from the peer because the peer was administratively disabled.
statePacketsReceived	long	tmnxMcLagPeerStatsPktsRxState	The value of tmnxMcLagPeerStatsPktsRxState indicates how many valid MC-Lag control packets of type lag state were received on this system from the peer.
tooShortPacketsDropped	long	tmnxMcLagPeerStatsDropPktTooShrt	The value of tmnxMcLagPeerStatsDropPktTooShrt indicates how many MC-Lag control packets were dropped on this system from the peer because the packet was too short.
unknownTlvPacketsDropped	long	tmnxMcLagPeerStatsDropUnknownTlv	The value of tmnxMcLagPeerStatsDropUnknownTlv indicates how many MC-Lag control packets were dropped on this system from the peer because the packet contained an unknown TLV.
PeerSynchronizationProtocolStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcPeerSyncStatsTable Monitored class: multichassis.PeerSynchronizationProtocol			

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5620 SAM counter name	Type	MIB counter name	Description
bodyDecodeErrorPacketsReceived	long	tmnxMcPeerSyncPktsRxErrBody	The value of tmnxMcPeerSyncPktsRxErrBody indicates the number of packets with body decode errors received from the multi-chassis peer.
dataPacketsReceived	long	tmnxMcPeerSyncPktsRxData	The value of tmnxMcPeerSyncPktsRxData indicates the number of hello packets received from the multi-chassis peer.
dataPacketsTransmitted	long	tmnxMcPeerSyncPktsTxData	The value of tmnxMcPeerSyncPktsTxData indicates the number of data packets transmitted to the multi-chassis peer.
erroneousPacketsReceived	long	tmnxMcPeerSyncPktsRxErr	The value of tmnxMcPeerSyncPktsRxErr indicates the number of erroneous packets received from the multi-chassis peer.
headerDecodeErrorPacketsReceived	long	tmnxMcPeerSyncPktsRxErrHeader	The value of tmnxMcPeerSyncPktsRxErrHeader indicates the number of packets with header decode errors received from the multi-chassis peer.
helloPacketsReceived	long	tmnxMcPeerSyncPktsRxHello	The value of tmnxMcPeerSyncPktsRxHello indicates the number of hello packets received from the multi-chassis peer.
helloPacketsTransmitted	long	tmnxMcPeerSyncPktsTxHello	The value of tmnxMcPeerSyncPktsTxHello indicates the number of hello packets transmitted to the multi-chassis peer.
otherPacketsReceived	long	tmnxMcPeerSyncPktsRxOther	The value of tmnxMcPeerSyncPktsRxOther indicates the number of all other packet types received from the multi-chassis peer.
otherPacketsTransmitted	long	tmnxMcPeerSyncPktsTxOther	The value of tmnxMcPeerSyncPktsTxOther indicates the number of all other packet types transmitted to the multi-chassis peer.
packetTransmissionErrors	long	tmnxMcPeerSyncPktsTxErr	The value of tmnxMcPeerSyncPktsTxErr indicates the number of packet transmission errors.
sequenceNumberErrorPacketsReceived	long	tmnxMcPeerSyncPktsRxErrSeqNum	The value of tmnxMcPeerSyncPktsRxErrSeqNum indicates the number of packets with sequence number errors received from the multi-chassis peer.
totalPacketsReceived	long	tmnxMcPeerSyncPktsRxAll	The value of tmnxMcPeerSyncPktsRxAll indicates the total number of packets received from the multi-chassis peer.
totalPacketsTransmitted	long	tmnxMcPeerSyncPktsTxAll	The value of tmnxMcPeerSyncPktsTxAll indicates the total number of packets transmitted to the multi-chassis peer.

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Table E-20 ospf statistics

5620 SAM counter name	Type	MIB counter name	Description
AreaBasicStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfAreaTable Monitored class: ospf.AreaSite			
nssaTranslatorEvents	long	tmnxOspfAreaNssaTranslatorEvents	The value of tmnxOspfAreaNssaTranslatorEvents indicates the number of Translator State changes that have occurred since the last boot-up.
totalLSACount	long	tmnxOspfAreaScopeLsaCount	The value of tmnxOspfAreaScopeLsaCount indicates the total number of Area-Scope link state advertisements in this area's link-state database.
totalSpfRuns	long	tmnxOspfAreaSpfRuns	The value of tmnxOspfAreaSpfRuns indicates the number of times that the intra-area route table has been calculated using this area's link-state database. This is typically done using Dijkstra's algorithm.
totalUnknownLSACount	long	tmnxOspfAreaScopeUnkLsaCount	The value of tmnxOspfAreaScopeUnkLsaCount indicates the total number of unknown Area-Scope link-state advertisements in this area's link-state database.
InterfaceGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
events	long	tmnxOspfIfEvents	The value of tmnxOspfIfEvents indicates the number of times this OSPF interface has changed its state, or an error has occurred.
InterfaceReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF Database Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
lsasWithBadChecksums	long	tmnxOspfIfRxBadChecksums	The value of tmnxOspfIfRxBadChecksums indicates the count of LSAs received with bad checksums.
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			

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5620 SAM counter name	Type	MIB counter name	Description
authorizationFailures	long	tmnxOspfIfAuthFailures	The value of tmnxOspfIfAuthFailures indicates the total number of OSPF packets received with an invalid authorization key since tmnxOspfAdminState was last set to 'enabled'.
badAreas	long	tmnxOspfIfBadAreas	The value of tmnxOspfIfBadAreas indicates the total number of OSPF packets received with an area mismatch since tmnxOspfAdminState was last set to 'enabled'.
badAuthorizationTypes	long	tmnxOspfIfBadAuthTypes	The value of tmnxOspfIfBadAuthTypes indicates the total number of OSPF packets received with an invalid authorization type since tmnxOspfAdminState was last set to 'enabled'.
badDeadIntervals	long	tmnxOspfIfBadDeadIntervals	The value of tmnxOspfIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badDestinationAddresses	long	tmnxOspfIfBadDstAddrs	The value of tmnxOspfIfBadDstAddrs indicates the total number of OSPF packets received with the incorrect IP destination address since tmnxOspfAdminState was last set to 'enabled'.
badHelloIntervals	long	tmnxOspfIfBadHelloIntervals	The value of tmnxOspfIfBadHelloIntervals indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badLengths	long	tmnxOspfIfBadLengths	The value of tmnxOspfIfBadLengths indicates the total number of OSPF packets received on this interface with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.
badNeighbors	long	tmnxOspfIfBadNeighbors	The value of tmnxOspfIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the information this router has for the neighbor since tmnxOspfAdminState was last set to 'enabled'.
badNetworks	long	tmnxOspfIfBadNetworks	The value of tmnxOspfIfBadNetworks indicates the total number of OSPF packets received with invalid network or mask since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badOptions	long	tmnxOspfIfBadOptions	The value of tmnxOspfIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this interface or area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfIfBadPacketTypes	The value of tmnxOspfIfBadPacketTypes indicates the total number of OSPF packets received with an invalid OSPF packet type since tmnxOspfAdminState was last set to 'enabled'.
badVersions	long	tmnxOspfIfBadVersions	The value of tmnxOspfIfBadVersions indicates the total number of OSPF packets received with bad OSPF version numbers since tmnxOspfAdminState was last set to 'enabled'.
badVirtualLinks	long	tmnxOspfIfBadVirtualLinks	The value of tmnxOspfIfBadVirtualLinks indicates the total number of OSPF packets received on this interface that are destined to a virtual link that does not exist since tmnxOspfAdminState was last set to 'enabled'.
discardPackets	long	tmnxOspfIfDiscardPackets	The value of tmnxOspfIfDiscardPackets indicates the total number of OSPF packets discarded on this interface since tmnxOspfAdminState was last set to 'enabled'.
retransmitOuts	long	tmnxOspfIfRetransmitOuts	The value of tmnxOspfIfRetransmitOuts indicates the total number of OSPF Retransmits sent on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF Database Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
NeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			
events	long	tmnxOspfNbrEvents	The value of tmnxOspfNbrEvents indicates the number of times this neighbor relationship has changed state, or an error has occurred.
retransmissionQueueLength	long	tmnxOspfNbrLsRetransQLen	The value of tmnxOspfNbrLsRetransQLen indicates the current length of the retransmission queue.
NeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			

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5620 SAM counter name	Type	MIB counter name	Description
badMtus	long	tmnxOspfNbrBadMTUs	The value of tmnxOspfNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.
badNeighborStates	long	tmnxOspfNbrBadNbrStates	The value of tmnxOspfNbrBadNbrStates indicates the total number of OSPF packets received when the neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfNbrBadPackets	The value of tmnxOspfNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfNbrBadSeqNums	The value of tmnxOspfNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
duplicates	long	tmnxOspfNbrDuplicates	The value of tmnxOspfNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfNbrLsaInstallFailed	The value of tmnxOspfNbrLsaInstallFailed indicates the total number of times an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfNbrLsaNotInLsdbs	The value of tmnxOspfNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.
numberOfRestarts	long	tmnxOspfNbrNumRestarts	The value of tmnxOspfNbrNumRestarts indicates the number of times the neighbor has attempted restart.
optionMismatches	long	tmnxOspfNbrOptionMismatches	The value of tmnxOspfNbrOptionMismatches indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
SiteStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfStatisticsTable Monitored class: ospf.Site			

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5620 SAM counter name	Type	MIB counter name	Description
addRouteFailed	long	tmnxOspfRoutesAddsFailed	The value of tmnxOspfRoutesAddsFailed indicates the number of times an attempt to add a route to the Route Table Manager (RTM) failed for this OSPF instance.
cspfDroppedRequests	long	tmnxOspfCSPFDroppedRequests	The value of tmnxOspfCSPFDroppedRequests indicates the number of dropped CSPF requests made by the OSPF protocol.
cspfPathsFound	long	tmnxOspfCSPFPathsFound	The value of tmnxOspfCSPFPathsFound indicates the number of of paths found for the requests made to OSPF protocol.
cspfPathsNotFound	long	tmnxOspfCSPFPathsNotFound	The value of tmnxOspfCSPFPathsNotFound indicates the number of of paths not found for the requests made to OSPF protocol.
cspfRequests	long	tmnxOspfCSPFRequests	The value of tmnxOspfCSPFRequests indicates the number of CSPF requests made to the OSPF protocol.
deleteRouteFailed	long	tmnxOspfRoutesDelsFailed	The value of tmnxOspfRoutesDelsFailed indicates the number of times an attempt to delete a route from the Route Table Manager (RTM) failed for this instance of OSPF.
inOverflowCount	long	tmnxOspfNumTimesInOverflow	The value of tmnxOspfNumTimesInOverflow indicates the count of the number of times the system was in the overflow state.
inOverloadCount	long	tmnxOspfNumTimesInOverload	The value of tmnxOspfNumTimesInOverload indicates the count of the number of times the system was overloaded.
modifyRouteFailed	long	tmnxOspfRoutesModsFailed	The value of tmnxOspfRoutesModsFailed indicates the number of times an attempt to modify a route in the Route Table Manager (RTM) failed for this instance of OSPF.
newLsasOriginated	long	tmnxOspfOriginateNewLsas	The value of tmnxOspfOriginateNewLsas indicates the number of new link-state advertisements that have been originated. This number is incremented each time the router originates a new LSA.
newLsasReceived	long	tmnxOspfRxNewLsas	The value of tmnxOspfRxNewLsas indicates the number of link-state advertisements received determined to be new instantiations. This number does not include newer instantiations of self-originated link-state advertisements.
spfAttemptsFailed	long	tmnxOspfSpfAttemptsFailed	The value of tmnxOspfSpfAttemptsFailed indicates the number of times an attempt to run SPF has failed because SPF runs have been stopped as a result of insufficient memory resources.

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5620 SAM counter name	Type	MIB counter name	Description
VirtualLinkGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
events	long	tmnxOspfVirtIfEvents	The value of tmnxOspfVirtIfEvents indicates the number of state changes or error events on this Virtual Link.
VirtualLinkReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
databaseDescriptionPackets	long	tmnxOspfVirtIfRxDBDs	The value of tmnxOspfVirtIfRxDBDs indicates the total number of OSPF Database Description packets received on this virtual interface.
databaseDescriptionPackets	long	tmnxOspfVirtIfTxDBDs	The value of tmnxOspfVirtIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this virtual interface.
helloPackets	long	tmnxOspfVirtIfRxHellos	The value of tmnxOspfVirtIfRxHellos indicates the total number of OSPF Hello packets received on this virtual interface.
helloPackets	long	tmnxOspfVirtIfTxHellos	The value of tmnxOspfVirtIfTxHellos indicates the total number of OSPF Hello packets transmitted on this virtual interface since it was created.
linkStateAcknowledgements	long	tmnxOspfVirtIfRxLSAcks	The value of tmnxOspfVirtIfRxLSAcks indicates the total number of Link State Acknowledgements received on this virtual interface.
linkStateAcknowledgements	long	tmnxOspfVirtIfTxLSAcks	The value of tmnxOspfVirtIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfRxLSRs	The value of tmnxOspfVirtIfRxLSRs indicates the total number of OSPF Link State Requests (LSRs) received on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfTxLSRs	The value of tmnxOspfVirtIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfRxLSUs	The value of tmnxOspfVirtIfRxLSUs indicates the total number of OSPF Link State Updates (LSUs) received on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfTxLSUs	The value of tmnxOspfVirtIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this virtual interface.
lsasWithBadChecksums	long	tmnxOspfVirtIfRxBadChecksums	The value of tmnxOspfVirtIfRxBadChecksums indicates the count of LSAs received with bad checksums.

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5620 SAM counter name	Type	MIB counter name	Description
totalPackets	long	tmnxOspfVirtIfRxPackets	The value of tmnxOspfVirtIfRxPackets indicates the total number of OSPF packets received on this virtual interface since it was created.
totalPackets	long	tmnxOspfVirtIfTxPackets	The value of tmnxOspfVirtIfTxPackets indicates the total number of OSPF packets transmitted on this virtual interface since it was created.
VirtualLinkStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
authorizationFailures	long	tmnxOspfVirtIfAuthFailures	The value of tmnxOspfVirtIfAuthFailures indicates the total number of OSPF packets received on this virtual interface with invalid authentication keys.
badAreas	long	tmnxOspfVirtIfBadAreas	The value of tmnxOspfVirtIfBadAreas indicates the total number of OSPF packets received on this virtual interface with area mismatches.
badAuthorizationTypes	long	tmnxOspfVirtIfBadAuthTypes	The value of tmnxOspfVirtIfBadAuthTypes indicates the total number of OSPF packets received on this virtual interface with invalid authentication types.
badDeadIntervals	long	tmnxOspfVirtIfBadDeadIntervals	The value of tmnxOspfVirtIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this virtual interface since tmnxOspfAdminState was last set to 'enabled'.
badDestinationAddresses	long	tmnxOspfVirtIfBadDstAddrs	The value of tmnxOspfVirtIfBadDstAddrs indicates the total number of OSPF packets received on this virtual interface with invalid destination IP address.
badHelloIntervals	long	tmnxOspfVirtIfBadHelloIntervls	The value of tmnxOspfVirtIfBadHelloIntervls indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this virtual interface since tmnxOspfAdminState was last set to 'enabled'.
badLengths	long	tmnxOspfVirtIfBadLengths	The value of tmnxOspfVirtIfBadLengths indicates the total number of OSPF packets received on this virtual interface with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.
badNeighbors	long	tmnxOspfVirtIfBadNeighbors	The value of tmnxOspfVirtIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the configuration this router has for the neighbor.

5620 SAM counter name	Type	MIB counter name	Description
badNetworks	long	tmnxOspfVirtIfBadNetworks	The value of tmnxOspfVirtIfBadNetworks indicates the total number of OSPF packets received on this virtual interface with invalid network or mask fields.
badOptions	long	tmnxOspfVirtIfBadOptions	The value of tmnxOspfVirtIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this virtual interface or transit-area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfVirtIfBadPacketTypes	The value of tmnxOspfVirtIfBadPacketTypes indicates the total number of OSPF packets received on this virtual interface with invalid OSPF packet types.
badVersions	long	tmnxOspfVirtIfBadVersions	The value of tmnxOspfVirtIfBadVersions indicates the total number of OSPF packets received on this virtual interface with invalid OSPF version numbers.
discardPackets	long	tmnxOspfVirtIfDiscardPackets	The value of tmnxOspfVirtIfDiscardPackets indicates the total number of OSPF packets discarded on this virtual interface.
retransmitOuts	long	tmnxOspfVirtIfRetransmitOuts	The value of tmnxOspfVirtIfRetransmitOuts indicates the total number of OSPF packets retransmitted on this virtual interface.
VirtualLinkTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
databaseDescriptionPackets	long	tmnxOspfVirtIfRxDBDs	The value of tmnxOspfVirtIfRxDBDs indicates the total number of OSPF Database Description packets received on this virtual interface.
databaseDescriptionPackets	long	tmnxOspfVirtIfTxDBDs	The value of tmnxOspfVirtIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this virtual interface.
helloPackets	long	tmnxOspfVirtIfRxHellos	The value of tmnxOspfVirtIfRxHellos indicates the total number of OSPF Hello packets received on this virtual interface.
helloPackets	long	tmnxOspfVirtIfTxHellos	The value of tmnxOspfVirtIfTxHellos indicates the total number of OSPF Hello packets transmitted on this virtual interface since it was created.
linkStateAcknowledgements	long	tmnxOspfVirtIfRxLSAcks	The value of tmnxOspfVirtIfRxLSAcks indicates the total number of Link State Acknowledgements received on this virtual interface.
linkStateAcknowledgements	long	tmnxOspfVirtIfTxLSAcks	The value of tmnxOspfVirtIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this virtual interface.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateRequests	long	tmnxOspfVirtIfRxLSRs	The value of tmnxOspfVirtIfRxLSRs indicates the total number of OSPF Link State Requests (LSRs) received on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfTxLSRs	The value of tmnxOspfVirtIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfRxLSUs	The value of tmnxOspfVirtIfRxLSUs indicates the total number of OSPF Link State Updates (LSUs) received on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfTxLSUs	The value of tmnxOspfVirtIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this virtual interface.
totalPackets	long	tmnxOspfVirtIfRxPackets	The value of tmnxOspfVirtIfRxPackets indicates the total number of OSPF packets received on this virtual interface since it was created.
totalPackets	long	tmnxOspfVirtIfTxPackets	The value of tmnxOspfVirtIfTxPackets indicates the total number of OSPF packets transmitted on this virtual interface since it was created.
VirtualNeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtNbrStatsTable Monitored class: ospf.VirtualNeighbor			
events	long	tmnxOspfVirtNbrEvents	The value of tmnxOspfVirtNbrEvents indicates the number of times this virtual link has changed its state, or an error has occurred.
retransmissionQueueLength	long	tmnxOspfVirtNbrLsRetransQLen	The value of tmnxOspfVirtNbrLsRetransQLen indicates the current length of the retransmission queue.
VirtualNeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtNbrStatsTable Monitored class: ospf.VirtualNeighbor			
badMtus	long	tmnxOspfVirtNbrBadMTUs	The value of tmnxOspfVirtNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfVirtNbrBadPackets	The value of tmnxOspfVirtNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.

5620 SAM counter name	Type	MIB counter name	Description
badSequenceNumbers	long	tmnxOspfVirtNbrBadSeqNums	The value of tmnxOspfVirtNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
badVirtualNeighborStates	long	tmnxOspfVirtNbrBadNbrStates	The value of tmnxOspfVirtNbrBadNbrStates indicates the total number of OSPF packets received when the virtual neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
duplicates	long	tmnxOspfVirtNbrDuplicates	The value of tmnxOspfVirtNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfVirtNbrLsaInstallFail	The value of tmnxOspfVirtNbrLsaInstallFail indicates the total number of times when an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfVirtNbrLsaNotInLsdbs	The value of tmnxOspfVirtNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.
numberOfRestarts	long	tmnxOspfVirtNbrNumRestarts	The value of tmnxOspfVirtNbrNumRestarts indicates the number of times the virtual neighbor has attempted restart since tmnxOspfAdminState was last set to 'enabled'.
optionMismatches	long	tmnxOspfVirtNbrOptionMismatch	The value of tmnxOspfVirtNbrOptionMismatch indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.

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Table E-21 pae802_1x statistics

5620 SAM counter name	Type	MIB counter name	Description
PaePortAuthenticatorDiagStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthDiagTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthAuthEapLogoffWhileAuthenticated	long	dot1xAuthAuthEapLogoffWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to DISCONNECTED, as a result of an EAPOL-Logoff message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.12.
dot1xAuthAuthEapLogoffWhileAuthenticating	long	dot1xAuthAuthEapLogoffWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of an EAPOL-Logoff message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.9.
dot1xAuthAuthEapStartsWhileAuthenticated	long	dot1xAuthAuthEapStartsWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to CONNECTING, as a result of an EAPOL-Start message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.11.
dot1xAuthAuthEapStartsWhileAuthenticating	long	dot1xAuthAuthEapStartsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of an EAPOL-Start message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.8.
dot1xAuthAuthFailWhileAuthenticating	long	dot1xAuthAuthFailWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to HELD, as a result of the Backend Authentication state machine indicating authentication failure (authFail = TRUE). REFERENCE 9.4.2, 8.5.4.2.6.
dot1xAuthAuthReauthsWhileAuthenticated	long	dot1xAuthAuthReauthsWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to CONNECTING, as a result of a reauthentication request (reAuthenticate = TRUE). REFERENCE 9.4.2, 8.5.4.2.10.
dot1xAuthAuthReauthsWhileAuthenticating	long	dot1xAuthAuthReauthsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of a reauthentication request (reAuthenticate = TRUE). REFERENCE 9.4.2, 8.5.4.2.7.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthAuthSuccessWhileAuthenticating	long	dot1xAuthAuthSuccessWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to AUTHENTICATED, as a result of the Backend Authentication state machine indicating successful authentication of the Supplicant (authSuccess = TRUE). REFERENCE 9.4.2, 8.5.4.2.4.
dot1xAuthAuthTimeoutsWhileAuthenticating	long	dot1xAuthAuthTimeoutsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of the Backend Authentication state machine indicating authentication timeout (authTimeout = TRUE). REFERENCE 9.4.2, 8.5.4.2.5.
dot1xAuthBackendAccessChallenges	long	dot1xAuthBackendAccessChallenges	Counts the number of times that the state machine receives an initial Access-Challenge packet from the Authentication server (i.e., aReq becomes TRUE, causing exit from the RESPONSE state). Indicates that the Authentication Server has communication with the Authenticator. REFERENCE 9.4.2, 8.5.6.2.2.
dot1xAuthBackendAuthFails	long	dot1xAuthBackendAuthFails	Counts the number of times that the state machine receives an EAP-Failure message from the Authentication Server (i.e., aFail becomes TRUE, causing a transition from RESPONSE to FAIL). Indicates that the Supplicant has not authenticated to the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.6.
dot1xAuthBackendAuthSuccesses	long	dot1xAuthBackendAuthSuccesses	Counts the number of times that the state machine receives an EAP-Success message from the Authentication Server (i.e., aSuccess becomes TRUE, causing a transition from RESPONSE to SUCCESS). Indicates that the Supplicant has successfully authenticated to the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.5.
dot1xAuthBackendNonNakResponsesFromSupplicant	long	dot1xAuthBackendNonNakResponsesFromSupplicant	Counts the number of times that the state machine receives a response from the Supplicant to an initial EAP-Request, and the response is something other than EAP-NAK (i.e., rxResp becomes TRUE, causing the state machine to transition from REQUEST to RESPONSE, and the response is not an EAP-NAK). Indicates that the Supplicant can respond to the Authenticator's chosen EAP-method. REFERENCE 9.4.2, 8.5.6.2.4.
dot1xAuthBackendOtherRequestsToSupplicant	long	dot1xAuthBackendOtherRequestsToSupplicant	Counts the number of times that the state machine sends an EAP-Request packet (other than an Identity, Notification, Failure or Success message) to the Supplicant (i.e., executes txReq on entry to the REQUEST state). Indicates that the Authenticator chose an EAP-method. REFERENCE 9.4.2, 8.5.6.2.3.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthBackendResponses	long	dot1xAuthBackendResponses	Counts the number of times that the state machine sends an initial Access-Request packet to the Authentication server (i.e., executes sendRespToServer on entry to the RESPONSE state). Indicates that the Authenticator attempted communication with the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.1.
dot1xAuthEapLogoffsWhileConnecting	long	dot1xAuthEapLogoffsWhileConnecting	Counts the number of times that the state machine transitions from CONNECTING to DISCONNECTED as a result of receiving an EAPOL-Logoff message. REFERENCE 9.4.2, 8.5.4.2.2.
dot1xAuthEntersAuthenticating	long	dot1xAuthEntersAuthenticating	Counts the number of times that the state machine transitions from CONNECTING to AUTHENTICATING, as a result of an EAP-Response/Identity message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.3.
dot1xAuthEntersConnecting	long	dot1xAuthEntersConnecting	Counts the number of times that the state machine transitions to the CONNECTING state from any other state. REFERENCE 9.4.2, 8.5.4.2.1.
PaePortAuthenticatorSessionStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthSessionStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthSessionAuthenticMethod	int	dot1xAuthSessionAuthenticMethod	The authentication method used to establish the session. REFERENCE 9.4.4, Session Authentication Method.
dot1xAuthSessionFramesRx	long	dot1xAuthSessionFramesRx	The number of user data frames received on this Port during the session. REFERENCE 9.4.4, Session Frames Received.
dot1xAuthSessionFramesTx	long	dot1xAuthSessionFramesTx	The number of user data frames transmitted on this Port during the session. REFERENCE 9.4.4, Session Frames Transmitted.
dot1xAuthSessionOctetsRx	UINT128	dot1xAuthSessionOctetsRx	The number of octets received in user data frames on this Port during the session. REFERENCE 9.4.4, Session Octets Received.
dot1xAuthSessionOctetsTx	UINT128	dot1xAuthSessionOctetsTx	The number of octets transmitted in user data frames on this Port during the session. REFERENCE 9.4.4, Session Octets Transmitted.
dot1xAuthSessionTerminateCause	int	dot1xAuthSessionTerminateCause	The reason for the session termination. REFERENCE 9.4.4, Session Terminate Cause.
dot1xAuthSessionTime	long	dot1xAuthSessionTime	The duration of the session in seconds. REFERENCE 9.4.4, Session Time.

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5620 SAM counter name	Type	MIB counter name	Description
PaePortAuthenticatorStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthEapLengthErrorFramesRx	long	dot1xAuthEapLengthErrorFramesRx	The number of EAPOL frames that have been received by this Authenticator in which the Packet Body Length field is invalid. REFERENCE 9.4.2, EAP length error frames received.
dot1xAuthEapolFramesRx	long	dot1xAuthEapolFramesRx	The number of valid EAPOL frames of any type that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL frames received.
dot1xAuthEapolFramesTx	long	dot1xAuthEapolFramesTx	The number of EAPOL frames of any type that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL frames transmitted.
dot1xAuthEapolLogoffFramesRx	long	dot1xAuthEapolLogoffFramesRx	The number of EAPOL Logoff frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Logoff frames received.
dot1xAuthEapolReqFramesTx	long	dot1xAuthEapolReqFramesTx	The number of EAP Request frames (other than Rq/Id frames) that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL Request frames transmitted.
dot1xAuthEapolReqIdFramesTx	long	dot1xAuthEapolReqIdFramesTx	The number of EAP Req/Id frames that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL Req/Id frames transmitted.
dot1xAuthEapolRespFramesRx	long	dot1xAuthEapolRespFramesRx	The number of valid EAP Response frames (other than Resp/Id frames) that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Response frames received.
dot1xAuthEapolRespIdFramesRx	long	dot1xAuthEapolRespIdFramesRx	The number of EAP Resp/Id frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Resp/Id frames received.
dot1xAuthEapolStartFramesRx	long	dot1xAuthEapolStartFramesRx	The number of EAPOL Start frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Start frames received.
dot1xAuthInvalidEapolFramesRx	long	dot1xAuthInvalidEapolFramesRx	The number of EAPOL frames that have been received by this Authenticator in which the frame type is not recognized. REFERENCE 9.4.2, Invalid EAPOL frames received.
dot1xAuthLastEapolFrameVersion	long	dot1xAuthLastEapolFrameVersion	The protocol version number carried in the most recently received EAPOL frame. REFERENCE 9.4.2, Last EAPOL frame version.

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Table E-22 ppp statistics

5620 SAM counter name	Type	MIB counter name	Description
PppStats MIB table name: TIMETRA-PPP-MIB.tmnxPppTable Monitored class: ppp.Interface			
keepaliveEchoReplyPacketsReceived	long	tmnxPppKaInPktCount	The number of echo-reply packets received.
keepaliveEchoRequestPacketsSent	long	tmnxPppKaOutPktCount	The number of echo-request packets sent.
keepaliveThresholdExceedsCount	long	tmnxPppKaThresholdExceedsCount	The number of times that tmnxPppKaDropCount was reached.
lqmInRate	long	tmnxPppLqmInRate	The average of 'SaveInPackets'/'PeerOutPackets' in the last five consecutive LQRs received.
lqmLqrPacketsReceived	long	tmnxPppLqmInPktCount	The number of LQR packets received.
lqmLqrPacketsSent	long	tmnxPppLqmOutPktCount	The number of LQR packets sent.
lqmOutRate	long	tmnxPppLqmOutRate	The average of 'PeerInPackets'/'LastOutPackets' in the last five consecutive LQRs received.
lqmThresholdExceedsCount	long	tmnxPppLqmThresholdExceedsCount	The number of times that either tmnxPppLqmInRate or tmnxPppLqmOutRate falls below the specified quality percentage when PPP quality or LQM is enforced.

Table E-23 radiusaccounting statistics

5620 SAM counter name	Type	MIB counter name	Description
PolicyStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAcctPlcyStatsTable Monitored class: radiusaccounting.Policy			
receiveResponses	long	tmnxSubAcctPlcyRxResponses	The value of tmnxSubAcctPlcyRxResponses indicates the number of accounting responses received for this policy.
requestRetries	long	tmnxSubAcctPlcySendRetries	The value of tmnxSubAcctPlcySendRetries indicates the number of retries to a different server for a single accounting request for this policy.
requestsFail	long	tmnxSubAcctPlcySendFail	The value of tmnxSubAcctPlcySendFail indicates how many accounting requests failed because the packet could not be sent out.
requestTimeOut	long	tmnxSubAcctPlcyReqTimeouts	The value of tmnxSubAcctPlcyReqTimeouts indicates the number of accounting requests which have timed out for this policy.

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5620 SAM counter name	Type	MIB counter name	Description
transferRequests	long	tmnxSubAcctPlcyTxRequests	The value of tmnxSubAcctPlcyTxRequests indicates the number of accounting requests transmitted for this policy.
RadiusEntryStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAcctPlcyRadStatsTable Monitored class: radiusaccounting.RadiusEntry			
receiveResponses	long	tmnxSubAcctPlcyRadRxResponses	The value of tmnxSubAcctPlcyRadRxResponses indicates the number of accounting responses received for this server.
requestsFail	long	tmnxSubAcctPlcyRadReqSendFail	The value of tmnxSubAcctPlcyRadReqSendFail indicates the number of accounting requests failed because the packet could not be sent out.
requestTimeOut	long	tmnxSubAcctPlcyRadReqTimeouts	The value of tmnxSubAcctPlcyRadReqTimeouts indicates the number of accounting requests which have timed out for this server.
transferRequests	long	tmnxSubAcctPlcyRadTxRequests	The value of tmnxSubAcctPlcyRadTxRequests indicates the number of accounting requests transmitted for this server.

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Table E-24 ressubscr statistics

5620 SAM counter name	Type	MIB counter name	Description
BsxSubCustRecAppGrpStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubTable Monitored class: ressubscr.ResidentialSubscriberInstance			
appGrpName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxSubStudyAppStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubSdyTable Monitored class: ressubscr.ResidentialSubscriberInstance			
appName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
HostTrackStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubHostTrkStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			

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5620 SAM counter name	Type	MIB counter name	Description
sapInnerEncapValue	long	sapEncapValue	—
sapPortId	String	sapPortId	—
serviceId	long	svcId	—
statsType	int	tmnxSubHostTrkStatsType	The value of tmnxSubHostTrkStatsType indicates the type of host tracking statistics contained in tmnxSubHostTrkStatsVal.
statsValue	long	tmnxSubHostTrkStatsVal	The value of tmnxSubHostTrkStatsType indicates the value of the host tracking statistics of the type indicated by tmnxSubHostTrkStatsType, for this subscriber host.
subscriberHostAddress	String	tmnxSubHostInfoV2IpAddress	The value of tmnxSubHostInfoV2IpAddress specifies the IP address of this subscriber host.
subscriberHostAddressType	int	tmnxSubHostInfoV2IpAddressType	The value of tmnxSubHostInfoV2IpAddressType specifies the type of address stored in tmnxSubHostInfoV2IpAddress.
subscrIdent	String	tmnxSubInfoSubIdent	The value of tmnxSubInfoSubIdent specifies the subscriber identification of this subscriber.
HostTrackStatsOnSap MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubHostSapTrkStatsTable Monitored classes: • vpls.L2AccessInterface • vprn.ServiceAccessPoint • ies.ServiceAccessPoint			
statsType	int	tmnxSubHostSapTrkStatsType	The value of tmnxSubHostSapTrkStatsType indicates the type of host tracking statistics contained in tmnxSubHostSapTrkStatsVal.
statsValue	long	tmnxSubHostSapTrkStatsVal	The value of tmnxSubHostSapTrkStatsType indicates the value of the host tracking statistics of the type indicated by tmnxSubHostSapTrkStatsType, for this host.
subscriberHostAddress	String	tmnxSubHostSapTrkHostAddr	The value of tmnxSubHostSapTrkHostAddr indicates the address of the host.
subscriberHostAddressType	int	tmnxSubHostSapTrkHostAddrType	The value of tmnxSubHostSapTrkHostAddrType indicates the address type of tmnxSubHostSapTrkHostAddr.
SLAProfInstEgrQStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSLAProfInstEgrQStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
egrQStatsDropInProfileOctets	UINT128	tmnxSPIEgrQStatsDropInProfOctets	The value of tmnxSPIEgrQStatsDropInProfOctets indicates the number of in-profile octets discarded by the egress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
egrQStatsDropInProfilePackets	UINT128	tmnxSPIEgrQStatsDropInProfPkts	The value of tmnxSPIEgrQStatsDropInProfPkts indicates the number of in-profile packets discarded by the egress Qchip.
egrQStatsDropOutProfileOctets	UINT128	tmnxSPIEgrQStatsDropOutProfOctets	The value of tmnxSPIEgrQStatsDropOutProfOctets indicates the number of out-of-profile octets discarded by the egress Qchip.
egrQStatsDropOutProfilePackets	UINT128	tmnxSPIEgrQStatsDropOutProfPkts	The value of tmnxSPIEgrQStatsDropOutProfPkts indicates the number of out-of-profile packets discarded by the egress Qchip.
egrQStatsFwdInProfileOctets	UINT128	tmnxSPIEgrQStatsFwdInProfOctets	The value of tmnxSPIEgrQStatsFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
egrQStatsFwdInProfilePackets	UINT128	tmnxSPIEgrQStatsFwdInProfPkts	The value of tmnxSPIEgrQStatsFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
egrQStatsFwdOutProfileOctets	UINT128	tmnxSPIEgrQStatsFwdOutProfOctets	The value of tmnxSPIEgrQStatsFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
egrQStatsFwdOutProfilePackets	UINT128	tmnxSPIEgrQStatsFwdOutProfPkts	The value of tmnxSPIEgrQStatsFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
egrQStatsQueueId	long	tmnxSPIEgrQStatsQueueId	The value of tmnxSPIEgrQStatsQueueId specifies the index of the egress QoS queue of this SLA profile instance.
slaProfileName	String	tmnxSLAProfName	The value of tmnxSLAProfName specifies the name of the SLA profile.
SLAProfInstIngQStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSLAProfInstIngQStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
ingQStatsDropHiPriorityOctets	UINT128	tmnxSPIIngQStatsDropHiPrioOctets	The value of tmnxSPIIngQStatsDropHiPrioOctets indicates the number of high priority octets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQStatsDropHiPriorityPackets	UINT128	tmnxSPIIngQStatsDropHiPrioPkts	The value of tmnxSPIIngQStatsDropHiPrioPkts indicates the number of high priority packets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQStatsDropLoPriorityOctets	UINT128	tmnxSPIIngQStatsDropLoPrioOctets	The value of tmnxSPIIngQStatsDropLoPrioOctets indicates the number of low priority octets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
ingQStatsDropLoPriorityPackets	UINT128	tmnxSPIIngQStatsDropLoPrioPkts	The value of tmnxSPIIngQStatsDropLoPrioPkts indicates the number of low priority packets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQStatsFwdInProfileOctets	UINT128	tmnxSPIIngQStatsFwdInProfOctets	The value of tmnxSPIIngQStatsFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
ingQStatsFwdInProfilePackets	UINT128	tmnxSPIIngQStatsFwdInProfPkts	The value of tmnxSPIIngQStatsFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
ingQStatsFwdOutProfileOctets	UINT128	tmnxSPIIngQStatsFwdOutProfOctets	The value of tmnxSPIIngQStatsFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
ingQStatsFwdOutProfilePackets	UINT128	tmnxSPIIngQStatsFwdOutProfPkts	The value of tmnxSPIIngQStatsFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
ingQStatsOffHiPriorityOctets	UINT128	tmnxSPIIngQStatsOffHiPrioOctets	The value of tmnxSPIIngQStatsOffHiPrioOctets indicates the number of high priority octets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQStatsOffHiPriorityPackets	UINT128	tmnxSPIIngQStatsOffHiPrioPkts	The value of tmnxSPIIngQStatsOffHiPrioPkts indicates the number of high priority packets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQStatsOffLoPriorityOctets	UINT128	tmnxSPIIngQStatsOffLoPrioOctets	The value of tmnxSPIIngQStatsOffLoPrioOctets indicates the number of low priority octets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQStatsOffLoPriorityPackets	UINT128	tmnxSPIIngQStatsOffLoPrioPkts	The value of tmnxSPIIngQStatsOffLoPrioPkts indicates the number of low priority packets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQStatsOffUncoloredOctets	UINT128	tmnxSPIIngQStatsOffUncolOctets	The value of tmnxSPIIngQStatsOffUncolOctets indicates the number of uncolored octets offered to the ingress Qchip.
ingQStatsOffUncoloredPackets	UINT128	tmnxSPIIngQStatsOffUncolPkts	The value of tmnxSPIIngQStatsOffUncolPkts indicates the number of uncolored packets offered to the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
ingQStatsQueueId	long	tmnxSPIIngQStatsQueueId	The value of tmnxSPIIngQStatsQueueId specifies the index of the ingress QoS queue of this SLA profile instance.
slaProfileName	String	tmnxSLAProfName	The value of tmnxSLAProfName specifies the name of the SLA profile.
SLAProfInstStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSLAProfInstStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
egrQchipDropInProfileOctets	UINT128	tmnxSPIStatsEgrQchipDropInProfOctets	The value of tmnxSPIStatsEgrQchipDropInProfOctets indicates the number of in-profile octets dropped by the egress Qchip.
egrQchipDropInProfilePackets	UINT128	tmnxSPIStatsEgrQchipDropInProfPkts	The value of tmnxSPIStatsEgrQchipDropInProfPkts indicates the number of in-profile packets dropped by the egress Qchip.
egrQchipDropOutProfileOctets	UINT128	tmnxSPIStatsEgrQchipDropOutProfOctets	The value of tmnxSPIStatsEgrQchipDropOutProfOctets indicates the number of out-of-profile octets dropped by the egress Qchip.
egrQchipDropOutProfilePackets	UINT128	tmnxSPIStatsEgrQchipDropOutProfPkts	The value of tmnxSPIStatsEgrQchipDropOutProfPkts indicates the number of out-of-profile packets dropped by the egress Qchip.
egrQchipFwdInProfileOctets	UINT128	tmnxSPIStatsEgrQchipFwdInProfOctets	The value of tmnxSPIStatsEgrQchipFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
egrQchipFwdInProfilePackets	UINT128	tmnxSPIStatsEgrQchipFwdInProfPkts	The value of tmnxSPIStatsEgrQchipFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
egrQchipFwdOutProfileOctets	UINT128	tmnxSPIStatsEgrQchipFwdOutProfOctets	The value of tmnxSPIStatsEgrQchipFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
egrQchipFwdOutProfilePackets	UINT128	tmnxSPIStatsEgrQchipFwdOutProfPkts	The value of tmnxSPIStatsEgrQchipFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
ingPchipOffHiPriorityOctets	UINT128	tmnxSPIStatsIngPchipOffHiPrioOctets	The value of tmnxSPIStatsIngPchipOffHiPrioOctets indicates the number of high priority octets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
ingPchipOffHiPriorityPackets	UINT128	tmnxSPIStatsIngPchipOffHiPrioPkts	The value of tmnxSPIStatsIngPchipOffHiPrioPkts indicates the number of high priority packets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffLoPriorityOctets	UINT128	tmnxSPIStatsIngPchipOffLoPrioOctets	The value of tmnxSPIStatsIngPchipOffLoPrioOctets indicates the number of low priority octets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffLoPriorityPackets	UINT128	tmnxSPIStatsIngPchipOffLoPrioPkts	The value of tmnxSPIStatsIngPchipOffLoPrioPkts indicates the number of low priority packets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffUncoloredOctets	UINT128	tmnxSPIStatsIngPchipOffUncolOctets	The value of tmnxSPIStatsIngPchipOffUncolOctets indicates the number of uncolored octets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffUncoloredPackets	UINT128	tmnxSPIStatsIngPchipOffUncolPkts	The value of tmnxSPIStatsIngPchipOffUncolPkts indicates the number of uncolored packets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQchipDropHiPriorityOctets	UINT128	tmnxSPIStatsIngQchipDropHiPrioOctets	The value of tmnxSPIStatsIngQchipDropHiPrioOctets indicates the number of high priority octets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQchipDropHiPriorityPackets	UINT128	tmnxSPIStatsIngQchipDropHiPrioPkts	The value of tmnxSPIStatsIngQchipDropHiPrioPkts indicates the number of high priority packets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQchipDropLoPriorityOctets	UINT128	tmnxSPIStatsIngQchipDropLoPrioOctets	The value of tmnxSPIStatsIngQchipDropLoPrioOctets indicates the number of low priority octets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQchipDropLoPriorityPackets	UINT128	tmnxSPIStatsIngQchipDropLoPrioPkts	The value of tmnxSPIStatsIngQchipDropLoPrioPkts indicates the number of low priority packets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQchipFwdInProfileOctets	UINT128	tmnxSPIStatsIngQchipFwdInProfOctets	The value of tmnxSPIStatsIngQchipFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
ingQchipFwdInProfilePackets	UINT128	tmnxSPIStatsIngQchipFwdInProfPkts	The value of tmnxSPIStatsIngQchipFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
ingQchipFwdOutProfileOctets	UINT128	tmnxSPIStatsIngQchipFwdOutProfOctets	The value of tmnxSPIStatsIngQchipFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
ingQchipFwdOutProfilePackets	UINT128	tmnxSPIStatsIngQchipFwdOutProfPkts	The value of tmnxSPIStatsIngQchipFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
slaProfileName	String	tmnxSLAProfName	The value of tmnxSLAProfName specifies the name of the SLA profile.
SubEgrQosSchedStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubEgrQosSchedStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
egrQosSchedName	String	tmnxSubEgrQosSchedStatsName	The value of tmnxSubEgrQosSchedStatsName specifies the egress QoS scheduler of this subscriber.
forwardedOctets	UINT128	tmnxSubEgrQosSchedStatsFwdOctets	The value of tmnxSubEgrQosSchedStatsFwdOctets indicates the number of forwarded octets by the egress Qchip, as determined by the subscriber egress scheduler policy.
forwardedPackets	UINT128	tmnxSubEgrQosSchedStatsFwdPkts	The value of tmnxSubEgrQosSchedStatsFwdPkts indicates the number of forwarded packets by the egress Qchip, as determined by the subscriber egress scheduler policy.
SubIngQosSchedStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubIngQosSchedStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
forwardedOctets	UINT128	tmnxSubIngQosSchedStatsFwdOctets	The value of tmnxSubIngQosSchedStatsFwdOctets indicates the number of forwarded octets, as determined by the subscriber ingress scheduler policy, offered by the Pchip to the Qchip.
forwardedPackets	UINT128	tmnxSubIngQosSchedStatsFwdPkts	The value of tmnxSubIngQosSchedStatsFwdPkts indicates the number of forwarded packets, as determined by the subscriber ingress scheduler policy, offered by the Pchip to the Qchip.
ingQosSchedName	String	tmnxSubIngQosSchedStatsName	The value of tmnxSubIngQosSchedStatsName specifies the ingress QoS scheduler of this subscriber.

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5620 SAM counter name	Type	MIB counter name	Description
SubscriberEgrOverrideCounterStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubEgrOverrideCounterTable Monitored class: ressubscr.ResidentialSubscriberInstance			
subEgrOvrCounterDropInProfileOctets	UINT128	tmnxSubEgrOvrCntrDropInProfOcts	The value of tmnxSubEgrOvrCntrDropInProfOcts indicates the number of high-priority octets dropped for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterDropInProfilePackets	UINT128	tmnxSubEgrOvrCntrDropInProfPkts	The value of tmnxSubEgrOvrCntrDropInProfPkts indicates the number of high-priority packets dropped for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterDropOutProfilePackets	UINT128	tmnxSubEgrOvrCntrDropOutProfPkts	The value of tmnxSubEgrOvrCntrDropOutProfPkts indicates the number of low-priority packets dropped for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterFwdInProfileOctets	UINT128	tmnxSubEgrOvrCntrFwdInProfOcts	The value of tmnxSubEgrOvrCntrFwdInProfOcts indicates the number of in-profile octets forwarded for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterFwdInProfilePackets	UINT128	tmnxSubEgrOvrCntrFwdInProfPkts	The value of tmnxSubEgrOvrCntrFwdInProfPkts indicates the number of in-profile packets forwarded for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterFwdOutProfileOctets	UINT128	tmnxSubEgrOvrCntrFwdOutProfOcts	The value of tmnxSubEgrOvrCntrFwdOutProfOcts indicates the number of out-of-profile octets forwarded for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterFwdOutProfilePackets	UINT128	tmnxSubEgrOvrCntrFwdOutProfPkts	The value of tmnxSubEgrOvrCntrFwdOutProfPkts indicates the number of out-of-profile packets forwarded for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterId	long	tmnxSubEgrOvrCntrId	The value of tmnxSubEgrOvrCntrId indicates the counter ID for the statistics.
subEgrOvrCounterSubPortId	long	tmnxSubEgrOvrCntrSubPortId	The value of tmnxSubEgrOvrCntrSubPortId indicates the access port for this entry.
SubscriberEgrQStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubscriberEgrQStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			

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5620 SAM counter name	Type	MIB counter name	Description
subEgrQStatsDropInProfileOctets	UINT128	tmnxSubEgrQStatsDropInProfOcts	The value of tmnxSubEgrQStatsDropInProfOcts indicates the number of high-priority octets dropped on egress on this subscriber.
subEgrQStatsDropInProfilePackets	UINT128	tmnxSubEgrQStatsDropInProfPkts	The value of tmnxSubEgrQStatsDropInProfPkts indicates the number of high-priority packets dropped on egress on this subscriber.
subEgrQStatsDropOutProfileOctets	UINT128	tmnxSubEgrQStatsDropOutProfOcts	The value of tmnxSubEgrQStatsDropOutProfOcts indicates the number of low-priority octets dropped on egress on this subscriber.
subEgrQStatsDropOutProfilePackets	UINT128	tmnxSubEgrQStatsDropOutProfPkts	The value of tmnxSubEgrQStatsDropOutProfPkts indicates the number of low-priority packets dropped on egress on this subscriber.
subEgrQStatsFwdInProfileOctets	UINT128	tmnxSubEgrQStatsFwdInProfOcts	The value of tmnxSubEgrQStatsFwdInProfOcts indicates the number of out-of-profile octets forwarded on egress on this subscriber.
subEgrQStatsFwdInProfilePackets	UINT128	tmnxSubEgrQStatsFwdInProfPkts	The value of tmnxSubEgrQStatsFwdInProfPkts indicates the number of in-profile packets forwarded on egress on this subscriber.
subEgrQStatsFwdOutProfileOctets	UINT128	tmnxSubEgrQStatsFwdOutProfOcts	The value of tmnxSubEgrQStatsFwdOutProfOcts indicates the number of out-of-profile octets forwarded on egress on this subscriber.
subEgrQStatsFwdOutProfilePackets	UINT128	tmnxSubEgrQStatsFwdOutProfPkts	The value of tmnxSubEgrQStatsFwdOutProfPkts indicates the number of out-of-profile packets forwarded on egress on this subscriber.
subEgrQStatsHsmdaQueueId	long	tmnxSubEgrQStatsQueueId	The value of tmnxSubEgrQStatsQueueId index specifies the Hsmda egress queue for this entry.
subEgrQStatsSubPortId	long	tmnxSubEgrQStatsSubPortId	The value of tmnxSubEgrQStatsSubPortId indicates the access port for this entry.
SubscriberHsmdaStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubscriberHsmdaStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
hsmdaStatsSubPortId	long	tmnxSubHsmdaStSubPortId	The value of tmnxSubHsmdaStSubPortId indicates the access port for this entry.
subEgrDropInProfileOctets	UINT128	tmnxSubHsmdaStEgrDropInProfOct	The value of tmnxSubHsmdaStEgrDropInProfOct indicates the number of high-priority octets discarded by the egress Qchip for this subscriber.

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5620 SAM counter name	Type	MIB counter name	Description
subEgrDropInProfilePackets	UINT128	tmnxSubHsmdaStEgrDropInProfPkt	The value of tmnxSubHsmdaStEgrDropInProfPkt indicates the number of high-priority packets discarded by the egress Qchip for this subscriber.
subEgrDropOutProfileOctets	UINT128	tmnxSubHsmdaStEgrDropOutProfOct	The value of tmnxSubHsmdaStEgrDropOutProfOct indicates the number of low-priority octets discarded by the egress Qchip for this subscriber.
subEgrDropOutProfilePackets	UINT128	tmnxSubHsmdaStEgrDropOutProfPkt	The value of tmnxSubHsmdaStEgrDropOutProfPkt indicates the number of low-priority packets discarded by the egress Qchip for this subscriber.
subEgrFwdInProfilePackets	UINT128	tmnxSubHsmdaStEgrFwdInProfPkt	The value of tmnxSubHsmdaStEgrFwdInProfPkt indicates the number of in-profile packets forwarded by the egress Qchip for this subscriber.
subEgrFwdOutProfileOctets	UINT128	tmnxSubHsmdaStEgrFwdOutProfOct	The value of tmnxSubHsmdaStEgrFwdOutProfOct indicates the number of out-of-profile octets forwarded by the egress Qchip for this subscriber.
subEgrFwdOutProfilePackets	UINT128	tmnxSubHsmdaStEgrFwdOutProfPkt	The value of tmnxSubHsmdaStEgrFwdOutProfPkt indicates the number of out-of-profile packets forwarded by the egress Qchip for this subscriber.
subIngDropHiPriorityOctets	UINT128	tmnxSubHsmdaStIngDropHiPrioOct	The value of tmnxSubHsmdaStIngDropHiPrioOct indicates the number of high-priority octets discarded by the ingress Qchip for this subscriber.
subIngDropHiPriorityPackets	UINT128	tmnxSubHsmdaStIngDropHiPrioPkt	The value of tmnxSubHsmdaStIngDropHiPrioPkt indicates the number of high-priority packets discarded by the ingress Qchip for this subscriber.
subIngDropLoPriorityOctets	UINT128	tmnxSubHsmdaStIngDropLoPrioOct	The value of tmnxSubHsmdaStIngDropLoPrioOct indicates the number of low-priority octets discarded by the ingress Qchip for this subscriber.
subIngDropLoPriorityPackets	UINT128	tmnxSubHsmdaStIngDropLoPrioPkt	The value of tmnxSubHsmdaStIngDropLoPrioPkt indicates the number of low-priority packets discarded by the ingress Qchip for this subscriber.
subIngFwdInProfileOctets	UINT128	tmnxSubHsmdaStIngFwdInProfOct	The value of tmnxSubHsmdaStIngFwdInProfOct indicates the number of out-of-profile octets forwarded by the ingress Qchip for this subscriber.

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5620 SAM counter name	Type	MIB counter name	Description
subIngFwdInProfilePackets	UINT128	tmnxSubHsmdaStIngFwdInProfPkt	The value of tmnxSubHsmdaStIngFwdInProfPkt indicates the number of in-profile packets forwarded by the ingress Qchip for this subscriber.
subIngFwdOutProfileOctets	UINT128	tmnxSubHsmdaStIngFwdOutProfOct	The value of tmnxSubHsmdaStIngFwdOutProfOct indicates the number of out-of-profile octets forwarded by the ingress Qchip for this subscriber.
subIngFwdOutProfilePackets	UINT128	tmnxSubHsmdaStIngFwdOutProfPkt	The value of tmnxSubHsmdaStIngFwdOutProfPkt indicates the number of out-of-profile packets forwarded by the ingress Qchip for this subscriber.
subIngOffTotalOctets	UINT128	tmnxSubHsmdaStIngOffTotalOct	The value of tmnxSubHsmdaStIngOffTotalOct indicates the total number of octets offered on ingress for this subscriber.
subIngOffTotalPackets	UINT128	tmnxSubHsmdaStIngOffTotalPkt	The value of tmnxSubHsmdaStIngOffTotalPkt indicates the total number of packets offered on ingress for this subscriber.
SubscriberIngOverrideCounterStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubIngOverrideCounterTable Monitored class: ressubscr.ResidentialSubscriberInstance			
subIngOvrCounterDropHiPriorityOctets	UINT128	tmnxSubIngOvrCntrDropHiPrioOcts	The value of tmnxSubIngOvrCntrDropHiPrioOcts indicates the number of high-priority octets dropped for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterDropHiPriorityPackets	UINT128	tmnxSubIngOvrCntrDropHiPrioPkts	The value of tmnxSubIngOvrCntrDropHiPrioPkts indicates the number of high-priority packets dropped for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterDropLoPriorityOctets	UINT128	tmnxSubIngOvrCntrDropLoPrioOcts	The value of tmnxSubIngOvrCntrDropLoPrioOcts indicates the number of low-priority octets dropped for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterDropLoPriorityPackets	UINT128	tmnxSubIngOvrCntrDropLoPrioPkts	The value of tmnxSubIngOvrCntrDropLoPrioPkts indicates the number of low-priority packets dropped for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterFwdInProfileOctets	UINT128	tmnxSubIngOvrCntrFwdInProfOcts	The value of tmnxSubIngOvrCntrFwdInProfOcts indicates the number of in-profile octets forwarded for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.

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5620 SAM counter name	Type	MIB counter name	Description
subIngOvrCounterFwdInProfilePackets	UINT128	tmnxSubIngOvrCntrFwdInProfPkts	The value of tmnxSubIngOvrCntrFwdInProfPkts indicates the number of in-profile packets forwarded for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterFwdOutProfileOctets	UINT128	tmnxSubIngOvrCntrFwdOutProfOcts	The value of tmnxSubIngOvrCntrFwdOutProfOcts indicates the number of out-of-profile octets forwarded for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterFwdOutProfilePackets	UINT128	tmnxSubIngOvrCntrFwdOutProfPkts	The value of tmnxSubIngOvrCntrFwdOutProfPkts indicates the number of out-of-profile packets forwarded for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterId	long	tmnxSubIngOvrCntrId	The value of tmnxSubIngOvrCntrId indicates the counter ID for the statistics.
subIngOvrCounterOffTotalOctets	UINT128	tmnxSubIngOvrCntrOffTotalOcts	The value of tmnxSubIngOvrCntrOffTotalOcts indicates the total number of octets offered on ingress on this subscriber.
subIngOvrCounterOffTotalPackets	UINT128	tmnxSubIngOvrCntrOffTotalPkts	The value of tmnxSubIngOvrCntrOffTotalPkts indicates the total number of packets offered on ingress on this subscriber.
subIngOvrCounterSubPortId	long	tmnxSubIngOvrCntrSubPortId	The value of tmnxSubIngOvrCntrSubPortId indicates the access port for this entry.
SubscriberIngQStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubscriberIngQStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
subIngQStatsDropHiPriorityOctets	UINT128	tmnxSubIngQStatsDropHiPrioOcts	The value of tmnxSubIngQStatsDropHiPrioOcts indicates the number of high-priority octets dropped on ingress on this subscriber.
subIngQStatsDropHiPriorityPackets	UINT128	tmnxSubIngQStatsDropHiPrioPkts	The value of tmnxSubIngQStatsDropHiPrioPkts indicates the number of high-priority packets dropped on ingress on this subscriber.
subIngQStatsDropLoPriorityOctets	UINT128	tmnxSubIngQStatsDropLoPrioOcts	The value of tmnxSubIngQStatsDropLoPrioOcts indicates the number of low-priority octets dropped on ingress on this subscriber.
subIngQStatsDropLoPriorityPackets	UINT128	tmnxSubIngQStatsDropLoPrioPkts	The value of tmnxSubIngQStatsDropLoPrioPkts indicates the number of low-priority packets dropped on ingress on this subscriber.

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5620 SAM counter name	Type	MIB counter name	Description
subIngQStatsFwdInProfileOctets	UINT128	tmnxSubIngQStatsFwdInProfOcts	The value of tmnxSubIngQStatsFwdInProfOcts indicates the number of out-of-profile octets forwarded on ingress on this subscriber.
subIngQStatsFwdInProfilePackets	UINT128	tmnxSubIngQStatsFwdInProfPkts	The value of tmnxSubIngQStatsFwdInProfPkts indicates the number of in-profile packets forwarded on ingress on this subscriber.
subIngQStatsFwdOutProfileOctets	UINT128	tmnxSubIngQStatsFwdOutProfOcts	The value of tmnxSubIngQStatsFwdOutProfOcts indicates the number of out-of-profile octets forwarded on ingress on this subscriber.
subIngQStatsFwdOutProfilePackets	UINT128	tmnxSubIngQStatsFwdOutProfPkts	The value of tmnxSubIngQStatsFwdOutProfPkts indicates the number of out-of-profile packets forwarded on ingress on this subscriber.
subIngQStatsHsmdaQueueId	long	tmnxSubIngQStatsQueueId	The value of tmnxSubIngQStatsQueueId index specifies the Hsmda ingress queue for this entry.
subIngQStatsOffTotalOctets	UINT128	tmnxSubIngQStatsOffTotalOcts	The value of tmnxSubIngQStatsOffTotalOcts indicates the total number of octets offered on ingress on this subscriber.
subIngQStatsOffTotalPackets	UINT128	tmnxSubIngQStatsOffTotalPkts	The value of tmnxSubIngQStatsOffTotalPkts indicates the total number of packets offered for this subscriber.
subIngQStatsSubPortId	long	tmnxSubIngQStatsSubPortId	The value of tmnxSubIngQStatsSubPortId indicates the access port for this entry.

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Table E-25 rip statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceReceiveStats MIB table name: TIMETRA-RIP-MIB.vRtrRipIfStatTable Monitored class: rip.Interface			
badPackets	long	vRtrRipIfStatAllRcvBadPackets	vRtrRipIfStatAllRcvBadPackets is the number of RIP updates received on this interface that were discarded as invalid.
v1BadRoutes	long	vRtrRipIfStatV1BadRoutes	vRtrRipIfStatV1BadRoutes is the number of routes, in valid RIPv1 packets, which were ignored for any reason (e.g. unknown address family, or invalid metric).
v1Requests	long	vRtrRipIfStatV1RcvRequests	vRtrRipIfStatV1RcvRequests is the number of RIPv1 request packets received by the RIP process.

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5620 SAM counter name	Type	MIB counter name	Description
v1RequestsIgnored	long	vRtrRipIfStatV1BadRequests	vRtrRipIfStatV1BadRequests is the number of RIPv1 request packets received by the RIP process that were subsequently discarded for any reason.
v1Updates	long	vRtrRipIfStatV1RcvUpdates	vRtrRipIfStatV1RcvUpdates is the number of RIPv1 response packets received by the RIP process.
v1UpdatesIgnored	long	vRtrRipIfStatV1BadUpdates	vRtrRipIfStatV1BadUpdates is the number of RIPv1 response packets received by the RIP process which were subsequently discarded for any reason.
v2AuthenticationErrors	long	vRtrRipIfStatAuthErrors	vRtrRipIfStatAuthErrors is the number of RIPv2 packets received by the RIP process which were subsequently discarded because of an error authenticating the packet.
v2BadRoutes	long	vRtrRipIfStatV2BadRoutes	vRtrRipIfStatV2BadRoutes is the number of routes, in valid RIPv2 packets, which were ignored for any reason (e.g. unknown address family, or invalid metric).
v2Requests	long	vRtrRipIfStatV2RcvRequests	vRtrRipIfStatV2RcvRequests is the number of RIPv2 request packets received by the RIP process.
v2RequestsIgnored	long	vRtrRipIfStatV2BadRequests	vRtrRipIfStatV2BadRequests is the number of RIPv2 request packets received by the RIP process that were subsequently discarded for any reason.
v2Updates	long	vRtrRipIfStatV2RcvUpdates	vRtrRipIfStatV2RcvUpdates is the number of RIPv2 response packets received by the RIP process.
v2UpdatesIgnored	long	vRtrRipIfStatV2BadUpdates	vRtrRipIfStatV2BadUpdates is the number of RIPv2 response packets received by the RIP process which were subsequently discarded for any reason.
InterfaceTransmitStats MIB table name: TIMETRA-RIP-MIB.vRtrRipIfStatTable Monitored class: rip.Interface			
totalUpdates	long	vRtrRipIfStatAllSentUpdates	vRtrRipIfStatAllSentUpdates is the number of all RIP updates actually sent on this interface. This explicitly does include full updates sent containing new information.
triggeredUpdates	long	vRtrRipIfStatAllTriggeredUpdates	vRtrRipIfStatAllTriggeredUpdates is the number of triggered RIP updates actually sent on this interface. This explicitly does include full updates sent containing new information.

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Table E-26 rsvp statistics

5620 SAM counter name	Type	MIB counter name	Description
AuthenticationKeyStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.AuthenticationKey			
errorPacketsReceived	UINT128	vRtrRsvpIfStatRxAuthErrors	The total number of RSVP packets with MD5 errors received on this RSVP interface.
errorPacketsTransmitted	UINT128	vRtrRsvpIfStatTxAuthErrors	The total number of RSVP packets with MD5 errors sent by this RSVP interface.
RsvpInterfaceReceiveStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.Interface			
acks	UINT128	vRtrRsvpIfStatRxAcks	The total number of RSVP ACK messages received when refresh reduction is enabled on this RSVP interface.
acks	UINT128	vRtrRsvpIfStatTxAcks	The total number of RSVP ACK messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatRxBundles	The total number of RSVP bundled packets received on this RSVP interface. Bundled packets are sent when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatTxBundles	The total number of RSVP bundled packets that have been transmitted on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatRxErrorPkts	The total number of RSVP packets with errors received on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatTxErrorPkts	The total number of RSVP packets with errors that have been transmitted on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatRxHelloReqs	The total number of RSVP HELLO REQ messages received on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatTxHelloReqs	The total number of RSVP HELLO REQ packets that have been transmitted on this RSVP interface.
helloTimeout	long	vRtrRsvpIfStatHelloTimeout	The total number of hello messages that timed out on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatRxPkts	The total number of error free RSVP packets received on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatTxPkts	The total number of error free RSVP packets that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatRxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatTxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted from this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
paths	UINT128	vRtrRsvpIfStatRxPaths	The total number of RSVP PATH messages that have been received on this RSVP interface.
paths	UINT128	vRtrRsvpIfStatTxPaths	The total number of RSVP PATH messages that have been transmitted from this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatRxPathTears	The total number of RSVP PATH TEAR messages that have been received on this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatTxPathTears	The total number of RSVP PATH TEAR messages that have been transmitted from this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatRxSRefreshes	The total number of RSVP summary refresh, SREFRESH, messages received on this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatTxSRefreshes	The total number of summary refresh, SREFRESH, messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
reserveConfirms	UINT128	vRtrRsvpIfStatRxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been received on this RSVP interface.
reserveConfirms	UINT128	vRtrRsvpIfStatTxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been transmitted from this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatRxResvErrors	The total number of RSVP RESV ERROR messages that have been received on this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatTxResvErrors	The total number of RSVP RESV ERROR messages that have been transmitted from this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatRxResvs	The total number of RSVP RESV messages that have been received on this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatTxResvs	The total number of RSVP RESV messages that have been transmitted from this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatRxResvTears	The total number of RSVP RESV TEAR messages that have been received on this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatTxResvTears	The total number of RSVP RESV TEAR messages that have been transmitted from this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatRxTotalPkts	The total number of RSVP packets, including errors, received on this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatTxTotalPkts	The total number of RSVP packets, including error packets, that have been transmitted on this RSVP interface.
RsvpInterfaceStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfTable Monitored class: rsvp.Interface			

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5620 SAM counter name	Type	MIB counter name	Description
activeReservations	long	vRtrRsvpIfActiveReservationCount	The total number of active RSVP sessions that have reserved bandwidth.
activeSessions	long	vRtrRsvpIfActiveSessionCount	The total number of active RSVP sessions on this interface. This count includes sessions that have requested bandwidth as well as sessions that have not requested any bandwidth.
bandwidth	long	vRtrRsvpIfBandwidth	The value of vRtrRsvpIfBandwidth specifies the amount of bandwidth in mega-bits per second (Mbps) available to be reserved for the RSVP protocol on this interface. This is typically the (port Speed * subscription Percentage).
reservedBandwidth	long	vRtrRsvpIfReservedBandwidth	The value of vRtrRsvpIfReservedBandwidth specifies the amount of bandwidth in mega-bits per second (Mbps) to reserved by the RSVP sessions on this interface. A value of zero (0) indicates that no bandwidth is reserved.
totalSessions	long	vRtrRsvpIfTotalSessionCount	The total number of RSVP sessions on this interface. This count includes sessions that are active as well as sessions that have been signalled but a response has not yet been received.
RsvpInterfaceTransmitStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.Interface			
acks	UINT128	vRtrRsvpIfStatRxAcks	The total number of RSVP ACK messages received when refresh reduction is enabled on this RSVP interface.
acks	UINT128	vRtrRsvpIfStatTxAcks	The total number of RSVP ACK messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatRxBundles	The total number of RSVP bundled packets received on this RSVP interface. Bundled packets are sent when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatTxBundles	The total number of RSVP bundled packets that have been transmitted on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatRxErrorPkts	The total number of RSVP packets with errors received on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatTxErrorPkts	The total number of RSVP packets with errors that have been transmitted on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatRxHelloReqs	The total number of RSVP HELLO REQ messages received on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatTxHelloReqs	The total number of RSVP HELLO REQ packets that have been transmitted on this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
packets	UINT128	vRtrRsvpIfStatRxPkts	The total number of error free RSVP packets received on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatTxPkts	The total number of error free RSVP packets that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatRxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatTxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted from this RSVP interface.
paths	UINT128	vRtrRsvpIfStatRxPaths	The total number of RSVP PATH messages that have been received on this RSVP interface.
paths	UINT128	vRtrRsvpIfStatTxPaths	The total number of RSVP PATH messages that have been transmitted from this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatRxPathTears	The total number of RSVP PATH TEAR messages that have been received on this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatTxPathTears	The total number of RSVP PATH TEAR messages that have been transmitted from this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatRxSRefreshes	The total number of RSVP summary refresh, SREFRESH, messages received on this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatTxSRefreshes	The total number of summary refresh, SREFRESH, messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
reserveConfirms	UINT128	vRtrRsvpIfStatRxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been received on this RSVP interface.
reserveConfirms	UINT128	vRtrRsvpIfStatTxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been transmitted from this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatRxResvErrors	The total number of RSVP RESV ERROR messages that have been received on this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatTxResvErrors	The total number of RSVP RESV ERROR messages that have been transmitted from this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatRxResvs	The total number of RSVP RESV messages that have been received on this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatTxResvs	The total number of RSVP RESV messages that have been transmitted from this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatRxResvTears	The total number of RSVP RESV TEAR messages that have been received on this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
reserveTears	UINT128	vRtrRsvpIfStatTxResvTears	The total number of RSVP RESV TEAR messages that have been transmitted from this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatRxTotalPkts	The total number of RSVP packets, including errors, received on this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatTxTotalPkts	The total number of RSVP packets, including error packets, that have been transmitted on this RSVP interface.
RsvpSessionStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpSessionStatTable Monitored class: rsvp.Session			
detourAge	long	vRtrRsvpSessionDetourAge	vRtrRsvpSessionDetourAge is the age (i.e., time from creation till now) of this detour LSP in 10-millisecond periods.
detourTimeUp	long	vRtrRsvpSessionDetourTimeUp	vRtrRsvpSessionDetourTimeUp is the total time in 10-millisecond units that the detour LSP has been operational.
pathsReceived	UINT128	vRtrRsvpSessionRxPaths	The total number of RSVP PATH messages received for this RSVP session.
pathsTransmitted	UINT128	vRtrRsvpSessionTxPaths	The total number of RSVP PATH messages transmitted for this RSVP session.
refreshPathsReceived	UINT128	vRtrRsvpSessionRxSrefreshPaths	The value of vRtrRsvpSessionRxSrefreshPaths indicates the number of times PATH was refreshed using message ID from full PATH refresh or Srefresh message for this RSVP session.
refreshPathsTransmitted	UINT128	vRtrRsvpSessionTxSrefreshPaths	The value of vRtrRsvpSessionTxSrefreshPaths indicates the number of times PATH refresh for the session was sent as a part of a Srefresh message.
refreshReservesReceived	UINT128	vRtrRsvpSessionRxSrefreshResvs	The value of vRtrRsvpSessionRxSrefreshResvs indicates the number of times RESV was refreshed using message ID from full RESV refresh or Srefresh message for this RSVP session.
refreshReservesTransmitted	UINT128	vRtrRsvpSessionTxSrefreshResvs	The value of vRtrRsvpSessionTxSrefreshResvs indicates the number of times RESV refresh for the session was sent as a part of a Srefresh message.
reservesReceived	UINT128	vRtrRsvpSessionRxResvs	The total number of RSVP RESV messages received for this RSVP session.
reservesTransmitted	UINT128	vRtrRsvpSessionTxResvs	The total number of RSVP RESV messages transmitted for this RSVP session.

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Table E-27 rtr statistics

5620 SAM counter name	Type	MIB counter name	Description
CpeCheckStats MIB table name: TIMETRA-VRTR-MIB.vRtrInetStatRteCpeChkStatsTable Monitored class: rtr.StaticRoute			
downTransitions	long	vRtrInetStatRteCpeChkDownTrans	The value of vRtrInetStatRteCpeChkDownTrans indicates the number of times the CPE has transitioned to the unavailable state.
echoReplyPacketsReceived	long	vRtrInetStatRteCpeChkInPktCnt	The value of vRtrInetStatRteCpeChkInPktCnt indicates the number of echo-reply packets received.
echoRequestPacketsSent	long	vRtrInetStatRteCpeChkOutPktCnt	The value of vRtrInetStatRteCpeChkOutPktCnt indicates the number of echo-request packets sent.
hostUpDownTime	long	vRtrInetStatRteCpeChkUpTime	The value of vRtrInetStatRteCpeChkUpTime indicates how long (in hundredths of a second) that the CPE has been available.
ttl	long	vRtrInetStatRteCpeChkTTL	The value of vRtrInetStatRteCpeChkTTL indicates the time, in seconds, before the CPE will be declared down. Upon receipt of an echo reply, it has the value of vRtrInetStaticRouteCpeInterval * vRtrInetStaticRouteCpeDropCnt and is decremented by 1 every second.
upTransitions	long	vRtrInetStatRteCpeChkUpTrans	The value of vRtrInetStatRteCpeChkUpTrans indicates the number of times the CPE has transitioned to the available state.
DhcpRelayStats MIB table name: TIMETRA-VRTR-MIB.vRtrIfDHCPRelayStatsTable Monitored classes: • rtr.DhcpRelayConfiguration • rtr.SubItfDhcpRelayCfg • rtr.GrpItfDhcpRelayCfg			
authPktsDiscarded	long	vRtrIfDHCPRelayAuthPktsDiscarded	vRtrIfDHCPRelayAuthPktsDiscarded indicates the total number of packets discarded because authentication was not successful.
authPktsSuccess	long	vRtrIfDHCPRelayAuthPktsSuccess	vRtrIfDHCPRelayAuthPktsSuccess indicates the total number of packets for which authentication was successful.
clientPacketsDiscarded	long	vRtrIfDHCPRelayClientPktsDiscarded	vRtrIfDHCPRelayClientPktsDiscarded indicates the total number of client packets dicarded by the DHCP relay agent.
clientPacketsRelayed	long	vRtrIfDHCPRelayClientPktsRelayed	vRtrIfDHCPRelayClientPktsRelayed indicates the total number of client packets relayed by the DHCP relay agent.

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5620 SAM counter name	Type	MIB counter name	Description
clientPktsProxLS	long	vRtrIfDHCPRelayClientPktsProxLS	vRtrIfDHCPRelayClientPktsProxLS indicates the total number of client packets proxied by the DHCP relay agent based on a lease state. The lease itself can have been obtained from a DHCP or RADIUS server. This is the so called lease split functionality.
clientPktsProxRad	long	vRtrIfDHCPRelayClientPktsProxRad	vRtrIfDHCPRelayClientPktsProxRad indicates the total number of client packets proxied by the DHCP relay agent based on data received from a RADIUS server.
clientPktsProxRad	long	vRtrIfDHCPRelayClientPktsSnooped	vRtrIfDHCPRelayClientPktsSnooped indicates the total number of client packets snooped by the DHCP relay agent.
pktsGenRelease	long	vRtrIfDHCPRelayPktsGenRelease	vRtrIfDHCPRelayPktsGenRelease indicates the total number of DHCP RELEASE messages spoofed by the DHCP relay agent to the DHCP server.
receivedMalformedPackets	long	vRtrIfDHCPRelayRxMalformedPkts	vRtrIfDHCPRelayRxMalformedPkts indicates the total number of malformed packets received by the DHCP relay agent.
receivedPackets	long	vRtrIfDHCPRelayRxPkts	vRtrIfDHCPRelayRxPkts indicates the total number of packets received by the DHCP relay agent.
receivedUntrustedPackets	long	vRtrIfDHCPRelayRxUntrustedPkts	vRtrIfDHCPRelayRxUntrustedPkts indicates the total number of untrusted packets received by the DHCP relay agent.
serverPacketsDiscarded	long	vRtrIfDHCPRelayServerPktsDiscarded	vRtrIfDHCPRelayServerPktsDiscarded indicates the total number of server packets discarded by the DHCP relay agent.
serverPacketsRelayed	long	vRtrIfDHCPRelayServerPktsRelayed	vRtrIfDHCPRelayServerPktsRelayed indicates the total number of server packets relayed by the DHCP relay agent.
serverPktsSnooped	long	vRtrIfDHCPRelayPktsGenForceRenew	vRtrIfDHCPRelayPktsGenForceRenew indicates the total number of DHCP FORCERENEW messages spoofed by the DHCP relay agent to the DHCP clients.
serverPktsSnooped	long	vRtrIfDHCPRelayServerPktsSnooped	vRtrIfDHCPRelayServerPktsSnooped indicates the total number of server packets snooped by the DHCP relay agent.
transmittedPackets	long	vRtrIfDHCPRelayTxPkts	vRtrIfDHCPRelayTxPkts indicates the total number of packets transmitted by the DHCP relay agent.
NetworkInterfaceURPFStats MIB table name: TIMETRA-VRTR-MIB.vRtrIfStatsTable Monitored class: rtr.NetworkInterface			
uRPFCheckFailPkts	UINT128	vRtrIfuRPFCheckFailPkts	The value of vRtrIfuRPFCheckFailPkts indicates the number of packets that fail uRPF check on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
uRPFCheckFailPktsHigh32	long	vRtrIfuRPFCheckFailPktsHigh32	The value of vRtrIfuRPFCheckFailPktsHigh32 indicates the high 32 bits of the value of vRtrIfuRPFCheckFailPkts.
uRPFCheckFailPktsLow32	long	vRtrIfuRPFCheckFailPktsLow32	The value of vRtrIfuRPFCheckFailPktsLow32 indicates the lower 32 bits of the value of vRtrIfuRPFCheckFailPkts.
RouteStats MIB table name: TIMETRA-VRTR-MIB.vRtrStatTable Monitored classes: • rtr.VirtualRouter • vprn.Site			
activeARPEntries	long	vRtrStatActiveARPEntries	vRtrStatActiveARPEntries indicates the number of active ARP entries for the specified virtual router in the system.
aggregateActiveRoutes	long	vRtrAggregateActiveRoutes	vRtrAggregateActiveRoutes indicates the current number of active aggregate routes for this instance of the route table.
aggregateRoutes	long	vRtrAggregateRoutes	vRtrAggregateRoutes indicates the current number of aggregate routes for this instance of the route table.
bgpActiveRoutes	long	vRtrBGPActiveRoutes	vRtrBGPActiveRoutes indicates the current number of active bgp routes for this instance of the route table.
bgpRoutes	long	vRtrBGPRoutes	vRtrBGPRoutes indicates the current number of bgp routes for this instance of the route table.
bgpVpnActiveRoutes	long	vRtrStatBGPVpnActiveRoutes	vRtrStatBGPVpnActiveRoutes indicates the current number of active VPN-IPV4 routes learned by MP-BGP for this virtual router.
bgpVpnRoutes	long	vRtrStatBGPVpnRoutes	vRtrStatBGPVpnRoutes indicates the current number of VPN-IPV4 routes learned by MP-BGP for this virtual router.
directActiveRoutes	long	vRtrDirectActiveRoutes	vRtrDirectActiveRoutes indicates the current number of active direct routes for this instance of the route table.
directRoutes	long	vRtrDirectRoutes	vRtrDirectRoutes indicates the current number of direct routes for this instance of the route table.
illegalLabelsReceived	long	vRtrStatIllegalLabels	vRtrStatIllegalLabels indicates the number of illegally received labels on this virtual router.
isisActiveRoutes	long	vRtrISISActiveRoutes	vRtrISISActiveRoutes indicates the current number of active isis routes for this instance of the route table.
isisRoutes	long	vRtrISISRoutes	vRtrISISRoutes indicates the current number of isis routes for this instance of the route table.

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5620 SAM counter name	Type	MIB counter name	Description
ldpActiveTunnels	long	vRtrStatActiveLdpTunnels	vRtrStatActiveLdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'ldp'.
ldpTunnels	long	vRtrStatTotalLdpTunnels	vRtrStatTotalLdpTunnels indicates the current number of both active and inactive LDP tunnels.
ospfActiveRoutes	long	vRtrOSPFActiveRoutes	vRtrOSPFActiveRoutes indicates the current number of active ospf routes for this instance of the route table.
ospfRoutes	long	vRtrOSPFRoutes	vRtrOSPFRoutes indicates the current number of ospf routes for this instance of the route table.
ripActiveRoutes	long	vRtrRIPActiveRoutes	vRtrRIPActiveRoutes indicates the current number of active rip routes for this instance of the route table.
ripRoutes	long	vRtrRIPRoutes	vRtrRIPRoutes indicates the current number of rip routes for this instance of the route table.
routerInterfacesActive	long	vRtrStatActiveIfs	vRtrStatActiveIfs indicates the current number of router interfaces with vRtrIfAdminState equal 'inService' on this virtual router.
routerInterfacesConfigured	long	vRtrStatConfiguredIfs	vRtrStatConfiguredIfs indicates the current number of router interfaces configured on this virtual router.
routesInVrf	long	vRtrStatCurrNumRoutes	vRtrStatCurrNumRoutes indicates the current number of routes in the VRF for this virtual router.
sdpActiveTunnels	long	vRtrStatActiveSdpTunnels	vRtrStatActiveSdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'sdp'.
sdpTunnels	long	vRtrStatTotalSdpTunnels	vRtrStatTotalSdpTunnels indicates the current number of both active and inactive SDP tunnels.
staticActiveRoutes	long	vRtrStaticActiveRoutes	vRtrStaticActiveRoutes indicates the current number of active static routes for this instance of the route table.
staticRoutes	long	vRtrStaticRoutes	vRtrStaticRoutes indicates the current number of static routes for this instance of the route table.
totalARPEntries	long	vRtrStatTotalARPEntries	vRtrStatTotalARPEntries indicates the total number of active and inactive ARP entries for the specified virtual router in the system.

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Table E-28 service statistics

5620 SAM counter name	Type	MIB counter name	Description
L3AccessInterfaceURPFStats MIB table name: TIMETRA-VRTR-MIB.vRtrIfStatsTable Monitored class: service.L3AccessInterface			
uRPFCheckFailPkts	UINT128	vRtrIfuRPFCheckFailPkts	The value of vRtrIfuRPFCheckFailPkts indicates the number of packets that fail uRPF check on this interface.
uRPFCheckFailPktsHigh32	long	vRtrIfuRPFCheckFailPktsHigh32	The value of vRtrIfuRPFCheckFailPktsHigh32 indicates the high 32 bits of the value of vRtrIfuRPFCheckFailPkts.
uRPFCheckFailPktsLow32	long	vRtrIfuRPFCheckFailPktsLow32	The value of vRtrIfuRPFCheckFailPktsLow32 indicates the lower 32 bits of the value of vRtrIfuRPFCheckFailPkts.
SapBaseStats MIB table name: TIMETRA-SAP-MIB.sapBaseStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
authenticationPacketsDiscarded	long	sapBaseStatsAuthenticationPktsDiscarded	The number of DHCP packets discarded as result of authentication.
authenticationPacketsSuccessful	long	sapBaseStatsAuthenticationPktsSuccess	The number of DHCP packets successfully authenticated.
customerId	long	sapBaseStatsCustId	The Customer ID for the associated service.
egressQChipDroppedInProfOctets	UINT128	sapBaseStatsEgressQchipDroppedInProfOctets	The number of in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipDroppedInProfPackets	UINT128	sapBaseStatsEgressQchipDroppedInProfPackets	The number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipDroppedOutProfOctets	UINT128	sapBaseStatsEgressQchipDroppedOutProfOctets	The number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipDroppedOutProfPackets	UINT128	sapBaseStatsEgressQchipDroppedOutProfPackets	The number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipForwardedInProfOctets	UINT128	sapBaseStatsEgressQchipForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
egressQChipForwardedInProfPackets	UINT128	sapBaseStatsEgressQchipForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
egressQChipForwardedOutProfOctets	UINT128	sapBaseStatsEgressQchipForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
egressQChipForwardedOutProfPackets	UINT128	sapBaseStatsEgressQchipForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
ingressPChipDroppedOctets	UINT128	sapBaseStatsIngressPchipDroppedOctets	The number of octets dropped by the ingress Pchip due to: SAP state, ingress MAC, IP or IPv6 filter, same segment discard, bad checksum, etc.
ingressPChipDroppedPackets	UINT128	sapBaseStatsIngressPchipDroppedPackets	The number of packets dropped by the ingress Pchip due to: SAP state, ingress MAC, IP or IPv6 filter, same segment discard, bad checksum, etc.
ingressPChipOfferedHiPrioOctets	UINT128	sapBaseStatsIngressPchipOfferedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedHiPrioPackets	UINT128	sapBaseStatsIngressPchipOfferedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedLoPrioOctets	UINT128	sapBaseStatsIngressPchipOfferedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedLoPrioPackets	UINT128	sapBaseStatsIngressPchipOfferedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedUncoloredOctets	UINT128	sapBaseStatsIngressPchipOfferedUncoloredOctets	The number of uncolored octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedUncoloredPackets	UINT128	sapBaseStatsIngressPchipOfferedUncoloredPackets	The number of uncolored packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressQChipDroppedHiPrioOctets	UINT128	sapBaseStatsIngressQchipDroppedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipDroppedHiPrioPackets	UINT128	sapBaseStatsIngressQchipDroppedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipDroppedLoPrioOctets	UINT128	sapBaseStatsIngressQchipDroppedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipDroppedLoPrioPackets	UINT128	sapBaseStatsIngressQchipDroppedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipForwardedInProfOctets	UINT128	sapBaseStatsIngressQchipForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
ingressQChipForwardedInProfPackets	UINT128	sapBaseStatsIngressQchipForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
ingressQChipForwardedOutProfOctets	UINT128	sapBaseStatsIngressQchipForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
ingressQChipForwardedOutProfPackets	UINT128	sapBaseStatsIngressQchipForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
SapEgrQosHsmdaCntrStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosHsmdaCntrStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface • service.ServiceAccessPoint			
sapEgrHsmdaCntrStCounterId	long	sapEgrHsmdaCntrStCntrId	The value of sapEgrHsmdaCntrStCntrId indicates the counter ID for the statistics.
sapEgrHsmdaCntrStCustomerId	long	sapEgrHsmdaCntrStCustId	The value of sapEgrHsmdaCntrStCustId indicates the customer ID for the statistics.
sapEgrHsmdaCntrStInProfileOctetsFwd	UINT128	sapEgrHsmdaCntrStInProfOctFwd	The value of sapEgrHsmdaCntrStInProfOctFwd indicates the number of out-of-profile packets forwarded for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStInProfilePacketsDropped	UINT128	sapEgrHsmdaCntrStInProfPktDrop	The value of sapEgrHsmdaCntrStInProfPktDrop indicates the number of in-profile packets dropped for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStInProfilePacketsFwd	UINT128	sapEgrHsmdaCntrStInProfPktFwd	The value of sapEgrHsmdaCntrStInProfPktFwd indicates the number of in-profile packets forwarded for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStInProfOctetsDropped	UINT128	sapEgrHsmdaCntrStInProfOctDrop	The value of sapEgrHsmdaCntrStInProfOctDrop indicates the number of out-of-profile packets dropped for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStOutProfileOctetsDropped	UINT128	sapEgrHsmdaCntrStOutProfOctDrop	The value of sapEgrHsmdaCntrStOutProfOctDrop indicates the number of out-of-profile packets dropped for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapEgrHsmdaCntrStOutProfileOctetsFwd	UINT128	sapEgrHsmdaCntrStOutProfOctFwd	The value of sapEgrHsmdaCntrStOutProfOctFwd indicates the number of out-of-profile packets forwarded for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStOutProfilePacketsDropped	UINT128	sapEgrHsmdaCntrStOutProfPktDrop	The value of sapEgrHsmdaCntrStOutProfPktDrop indicates the number of out-of-profile packets dropped for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStOutProfilePacketsFwd	UINT128	sapEgrHsmdaCntrStOutProfPktFwd	The value of sapEgrHsmdaCntrStOutProfPktFwd indicates the number of out-of-profile packets forwarded for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
SapEgrQosHsmdaQueueStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosHsmdaQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface • service.ServiceAccessPoint			
sapEgrHsmdaQStatCustomerId	long	sapEgrHsmdaQStatCustId	The value of sapEgrHsmdaQStatCustId indicates the customer ID for the statistics.
sapEgrHsmdaQStatInProfileOctetsDropped	UINT128	sapEgrHsmdaQStatInProfOctDropd	The value of sapEgrHsmdaQStatInProfOctDropd indicates the number of out-of-profile packets dropped on egress on this SAP.
sapEgrHsmdaQStatInProfileOctetsFwd	UINT128	sapEgrHsmdaQStatInProfOctFwd	The value of sapEgrHsmdaQStatInProfOctFwd indicates the number of out-of-profile packets forwarded on egress on this SAP.
sapEgrHsmdaQStatInProfilePacketsDropped	UINT128	sapEgrHsmdaQStatInProfPktDropd	The value of sapEgrHsmdaQStatInProfPktDropd indicates the number of in-profile packets dropped on egress on this SAP.
sapEgrHsmdaQStatInProfilePacketsFwd	UINT128	sapEgrHsmdaQStatInProfPktFwd	The value of sapEgrHsmdaQStatInProfPktFwd indicates the number of in-profile packets forwarded on egress on this SAP.
sapEgrHsmdaQStatOutProfileOctetsDropped	UINT128	sapEgrHsmdaQStatOutProfOctDropd	The value of sapEgrHsmdaQStatOutProfOctDropd indicates the number of out-of-profile packets dropped on egress on this SAP.
sapEgrHsmdaQStatOutProfileOctetsFwd	UINT128	sapEgrHsmdaQStatOutProfOctFwd	The value of sapEgrHsmdaQStatOutProfOctFwd indicates the number of out-of-profile packets forwarded on egress on this SAP.
sapEgrHsmdaQStatOutProfilePacketsDropped	UINT128	sapEgrHsmdaQStatOutProfPktDropd	The value of sapEgrHsmdaQStatOutProfPktDropd indicates the number of out-of-profile packets dropped on egress on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapEgrHsmdaQStatOutProfilePacketsFwd	UINT128	sapEgrHsmdaQStatOutProfPktFwd	The value of sapEgrHsmdaQStatOutProfPktFwd indicates the number of out-of-profile packets forwarded on egress on this SAP.
sapEgrHsmdaQStatQueueId	long	sapEgrQosHsmdaQueueId	The value of sapEgrQosHsmdaQueueId index specifies the Hsmda egress queue which this override record will affect.
SapEgrQosPlcyQueueStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosPlcyQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedInProfOctets	UINT128	sapEgQosPlcyQueueStatsDroppedInProfOctets	The value of sapEgQosPlcyQueueStatsDroppedInProfOctets indicates the number in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedInProfPackets	UINT128	sapEgQosPlcyQueueStatsDroppedInProfPackets	The value of sapEgQosPlcyQueueStatsDroppedInProfPackets indicates the number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfOctets	UINT128	sapEgQosPlcyQueueStatsDroppedOutProfOctets	The value of sapEgQosPlcyQueueStatsDroppedOutProfOctets indicates the number out-of-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfPackets	UINT128	sapEgQosPlcyQueueStatsDroppedOutProfPackets	The value of sapEgQosPlcyQueueStatsDroppedOutProfPackets indicates the number out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapEgQosPlcyQueueStatsForwardedInProfOctets	The value of sapEgQosPlcyQueueStatsForwardedInProfOctets indicates the number ofin-profile octets (rate below CIR) forwarded by the egress Qchip.
forwardedInProfPackets	UINT128	sapEgQosPlcyQueueStatsForwardedInProfPackets	The value of sapEgQosPlcyQueueStatsForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
forwardedOutProfOctets	UINT128	sapEgQosPlcyQueueStatsForwardedOutProfOctets	The value of sapEgQosPlcyQueueStatsForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
forwardedOutProfPackets	UINT128	sapEgQosPlcyQueueStatsForwardedOutProfPackets	The value of sapEgQosPlcyQueueStatsForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
policyId	long	sapEgQosPlcyQueuePlcyId	The row index in the tSapEgressTable corresponding to this egress QoS policy.
queueId	long	sapEgQosPlcyQueueId	The value of sapEgQosPlcyQueueId indicates index of the egress QoS queue of this SAP.
SapEgrQosPlcyStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedInProfOctets	UINT128	sapEgQosPlcyDroppedInProfOctets	The value of the object sapEgQosPlcyDroppedInProfOctets indicates the number of in-profile octets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedInProfPackets	UINT128	sapEgQosPlcyDroppedInProfPackets	The value of the object sapEgQosPlcyDroppedInProfPackets indicates the number of in-profile packets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfOctets	UINT128	sapEgQosPlcyDroppedOutProfOctets	The value of the object sapEgQosPlcyDroppedOutProfOctets indicates the number of out-profile octets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfPackets	UINT128	sapEgQosPlcyDroppedOutProfPackets	The value of the object sapEgQosPlcyDroppedOutProfPackets indicates the number of out-profile packets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapEgQosPlcyForwardedInProfOctets	The value of the object sapEgQosPlcyForwardedInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
forwardedInProfPackets	UINT128	sapEgQosPlcyForwardedInProfPackets	The value of the object sapEgQosPlcyForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
forwardedOutProfOctets	UINT128	sapEgQosPlcyForwardedOutProfOctets	The value of the object sapEgQosPlcyForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
forwardedOutProfPackets	UINT128	sapEgQosPlcyForwardedOutProfPackets	The value of the object sapEgQosPlcyForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
policyId	long	sapEgQosPlcyId	The value of the object sapEgQosPlcyId indicates the row index in the tSapEgressTable corresponding to this egress QoS policy, or one if no policy is specified.
SapEgrQosQueueStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
customerId	long	sapEgrQosCustId	The Customer ID for the associated service.
droppedInProfOctets	UINT128	sapEgrQosQueueStatsDroppedInProfOctets	The number of in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedInProfPackets	UINT128	sapEgrQosQueueStatsDroppedInProfPackets	The number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfOctets	UINT128	sapEgrQosQueueStatsDroppedOutProfOctets	The number of out-of-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfPackets	UINT128	sapEgrQosQueueStatsDroppedOutProfPackets	The number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapEgrQosQueueStatsForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
forwardedInProfPackets	UINT128	sapEgrQosQueueStatsForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
forwardedOutProfOctets	UINT128	sapEgrQosQueueStatsForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
forwardedOutProfPackets	UINT128	sapEgrQosQueueStatsForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
queueId	long	sapEgrQosQueueId	The index of the egress QoS queue of this SAP.
SapEgrQosSchedStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosSchedStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			

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5620 SAM counter name	Type	MIB counter name	Description
customerId	long	sapEgrQosSchedCustId	The Customer ID for the associated service.
forwardedOctets	UINT128	sapEgrQosSchedStatsForwardedOctets	The number of forwarded octets by the egress Qchip, as determined by the SAP egress scheduler policy.
forwardedPackets	UINT128	sapEgrQosSchedStatsForwardedPackets	The number of forwarded packets by the egress Qchip, as determined by the SAP egress scheduler policy.
qosSchedName	String	sapEgrQosSchedName	The index of the egress QoS scheduler of this SAP.
SapEgrSchedPlcyPortStats MIB table name: TIMETRA-SAP-MIB.sapEgrSchedPlcyPortStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapEgrSchedPlcyPortStatsFwdOct	The value of sapEgrSchedPlcyPortStatsFwdOct indicates the number of forwarded octets,as determined by the SAP egress scheduler policy, offered by the Pchip to the Qchip.
forwardedPackets	UINT128	sapEgrSchedPlcyPortStatsFwdPkt	The value of sapEgrSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the SAP egress scheduler policy, offered by the Pchip to the Qchip.
SapEgrSchedPlcyStats MIB table name: TIMETRA-SAP-MIB.sapEgrSchedPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapEgrSchedPlcyStatsFwdOct	The number of octets forwarded by the egress Qchip, as determined by the SAP egress scheduler policy.
forwardedPackets	UINT128	sapEgrSchedPlcyStatsFwdPkt	The number of packets forwarded by the egress Qchip, as determined by the SAP egress scheduler policy.
SapIngQosHsmdaCntrStats MIB table name: TIMETRA-SAP-MIB.sapIngQosHsmdaCntrStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface • service.ServiceAccessPoint			
sapIngHsmdaCntrStAllOctetsOffered	UINT128	sapIngHsmdaCntrStAllOctOffered	The value of sapIngHsmdaCntrStAllOctOffered indicates the total number of octets offered on ingress on this SAP.
sapIngHsmdaCntrStAllPacketsOffered	UINT128	sapIngHsmdaCntrStAllPktOffered	The value of sapIngHsmdaCntrStAllPktOffered indicates the total number of packets offered on ingress on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapIngHsmdaCntrStCounterId	long	sapIngHsmdaCntrStCntrId	The value of sapIngHsmdaCntrStCntrId indicates the counter ID for the statistics.
sapIngHsmdaCntrStCusomerId	long	sapIngHsmdaCntrStCustId	The value of sapIngHsmdaCntrStCustId indicates the customer ID for the statistics.
sapIngHsmdaCntrStHiOctetsDropped	UINT128	sapIngHsmdaCntrStHiOctDrop	The value of sapIngHsmdaCntrStHiOctDrop indicates the number of high-priority octets dropped for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStHiPacketsDropped	UINT128	sapIngHsmdaCntrStHiPktDrop	The value of sapIngHsmdaCntrStHiPktDrop indicates the number of high-priority packets dropped for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStInProfileOctetsFwd	UINT128	sapIngHsmdaCntrStInProfOctFwd	The value of sapIngHsmdaCntrStInProfOctFwd indicates the number of out-of-profile packets forwarded for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStInProfilePacketsFwd	UINT128	sapIngHsmdaCntrStInProfPktFwd	The value of sapIngHsmdaCntrStInProfPktFwd indicates the number of in-profile packets forwarded for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStLoOctetsDropped	UINT128	sapIngHsmdaCntrStLoOctDrop	The value of sapIngHsmdaCntrStLoOctDrop indicates the number of low-priority octets dropped for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStLoPacketsDropped	UINT128	sapIngHsmdaCntrStLoPktDrop	The value of sapIngHsmdaCntrStLoPktDrop indicates the number of low-priority packets dropped for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStOutProfileOctetsFwd	UINT128	sapIngHsmdaCntrStOutProfOctFwd	The value of sapIngHsmdaCntrStOutProfOctFwd indicates the number of out-of-profile packets forwarded for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStOutProfilePacketsFwd	UINT128	sapIngHsmdaCntrStOutProfPktFwd	The value of sapIngHsmdaCntrStOutProfPktFwd indicates the number of out-of-profile packets forwarded for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
SapIngQosHsmdaQueueStats MIB table name: TIMETRA-SAP-MIB.sapIngQosHsmdaQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface • service.ServiceAccessPoint			
sapIngHsmdaQStatAllOctetsOffered	UINT128	sapIngHsmdaQStatAllOctsOffered	The value of sapIngHsmdaQStatAllOctsOffered indicates the total number of octets offered on ingress on this SAP.
sapIngHsmdaQStatAllPacketsOffered	UINT128	sapIngHsmdaQStatAllPktsOffered	The value of sapIngHsmdaQStatAllPktsOffered indicates the total number of packets offered on ingress on this SAP.
sapIngHsmdaQStatCustomerId	long	sapIngHsmdaQStatCustId	The value of sapIngHsmdaQStatCustId indicates the customer ID for the statistics.
sapIngHsmdaQStatHiOctetsDropped	UINT128	sapIngHsmdaQStatHiOctsDropped	The value of sapIngHsmdaQStatHiOctsDropped indicates the number of high-priority octets dropped on ingress on this SAP.
sapIngHsmdaQStatHiPacketsDropped	UINT128	sapIngHsmdaQStatHiPktsDropped	The value of sapIngHsmdaQStatHiPktsDropped indicates the number of high-priority packets dropped on ingress on this SAP.
sapIngHsmdaQStatInProfileOctetsFwd	UINT128	sapIngHsmdaQStatInProfOctsFwd	The value of sapIngHsmdaQStatInProfOctsFwd indicates the number of out-of-profile packets forwarded on ingress on this SAP.
sapIngHsmdaQStatInProfilePacketsFwd	UINT128	sapIngHsmdaQStatInProfPktsFwd	The value of sapIngHsmdaQStatInProfPktsFwd indicates the number of in-profile packets forwarded on ingress on this SAP.
sapIngHsmdaQStatLoOctetsDropped	UINT128	sapIngHsmdaQStatLoOctsDropped	The value of sapIngHsmdaQStatLoOctsDropped indicates the number of low-priority octets dropped on ingress on this SAP.
sapIngHsmdaQStatLoPacketsDropped	UINT128	sapIngHsmdaQStatLoPktsDropped	The value of sapIngHsmdaQStatLoPktsDropped indicates the number of low-priority packets dropped on ingress on this SAP.
sapIngHsmdaQStatOutProfileOctetsFwd	UINT128	sapIngHsmdaQStatOutProfOctsFwd	The value of sapIngHsmdaQStatOutProfOctsFwd indicates the number of out-of-profile packets forwarded on ingress on this SAP.
sapIngHsmdaQStatOutProfilePacketsFwd	UINT128	sapIngHsmdaQStatOutProfPktsFwd	The value of sapIngHsmdaQStatOutProfPktsFwd indicates the number of out-of-profile packets forwarded on ingress on this SAP.
sapIngHsmdaQStatQueueId	long	sapIngQosHsmdaQueueId	The value of sapIngQosHsmdaQueueId index specifies the Hsmda egress queue which this override record will affect.

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5620 SAM counter name	Type	MIB counter name	Description
SapIngQosPlcyQueueStats MIB table name: TIMETRA-SAP-MIB.sapIngQosPlcyQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedHiPrioOctets	UINT128	sapIgQosPlcyQueueStatsDroppedHiPrioOctets	The value of sapIgQosPlcyQueueStatsDroppedHiPrioOctets indicates the number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedHiPrioPackets	UINT128	sapIgQosPlcyQueueStatsDroppedHiPrioPackets	The value of sapIgQosPlcyQueueStatsDroppedHiPrioPackets indicates the number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioOctets	UINT128	sapIgQosPlcyQueueStatsDroppedLoPrioOctets	The value of sapIgQosPlcyQueueStatsDroppedLoPrioOctets indicates the number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioPackets	UINT128	sapIgQosPlcyQueueStatsDroppedLoPrioPackets	The value of sapIgQosPlcyQueueStatsDroppedLoPrioPackets indicates the number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapIgQosPlcyQueueStatsForwardedInProfOctets	The value of sapIgQosPlcyQueueStatsForwardedInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
forwardedInProfPackets	UINT128	sapIgQosPlcyQueueStatsForwardedInProfPackets	The value of sapIgQosPlcyQueueStatsForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
forwardedOutProfOctets	UINT128	sapIgQosPlcyQueueStatsForwardedOutProfOctets	The value of sapIgQosPlcyQueueStatsForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
forwardedOutProfPackets	UINT128	sapIgQosPlcyQueueStatsForwardedOutProfPackets	The value of sapIgQosPlcyQueueStatsForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
offeredHiPrioOctets	UINT128	sapIgQosPlcyQueueStatsOfferedHiPrioOctets	The value of sapIgQosPlcyQueueStatsOfferedHiPrioOctets indicates the number of high priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredHiPrioPackets	UINT128	sapIgQosPlcyQueueStatsOfferedHiPrioPackets	The value of sapIgQosPlcyQueueStatsOfferedHiPrioPackets indicates the number of high priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredLoPrioOctets	UINT128	sapIgQosPlcyQueueStatsOfferedLoPrioOctets	The value of sapIgQosPlcyQueueStatsOfferedLoPrioOctets indicates the number of low priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredLoPrioPackets	UINT128	sapIgQosPlcyQueueStatsOfferedLoPrioPackets	The value of sapIgQosPlcyQueueStatsOfferedLoPrioPackets indicates the number of low priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
policyId	long	sapIgQosPlcyQueuePlcyId	The value of the object sapIgQosPlcyQueuePlcyId indicates the row index in the tSapIngressTable corresponding to this ingress QoS policy.
queueId	long	sapIgQosPlcyQueueId	The index of the ingress QoS queue of this SAP used by the policy indicated by sapIgQosPlcyQueuePlcyId.
uncoloredOctetsOffered	UINT128	sapIgQosPlcyQueueStatsUncoloredOctetsOffered	The value of sapIgQosPlcyQueueStatsUncoloredOctetsOffered indicates the number of uncolored octets offered to the ingress Qchip.
uncoloredPacketsOffered	UINT128	sapIgQosPlcyQueueStatsUncoloredPacketsOffered	The value of sapIgQosPlcyQueueStatsUncoloredPacketsOffered indicates the number of uncolored packets offered to the ingress Qchip.
SapIngQosPlcyStats MIB table name: TIMETRA-SAP-MIB.sapIngrQosPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedHiPrioOctets	UINT128	sapIgQosPlcyDroppedHiPrioOctets	The value of the object sapIgQosPlcyDroppedHiPrioOctets indicates the number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.

5620 SAM counter name	Type	MIB counter name	Description
droppedHiPrioPackets	UINT128	sapIgQosPlcyDroppedHiPrioPackets	The value of the object sapIgQosPlcyDroppedHiPrioPackets indicates the number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioOctets	UINT128	sapIgQosPlcyDroppedLoPrioOctets	The value of the object sapIgQosPlcyDroppedLoPrioOctets indicates the number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioPackets	UINT128	sapIgQosPlcyDroppedLoPrioPackets	The value of the object sapIgQosPlcyDroppedLoPrioPackets indicates the number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapIgQosPlcyForwardedInProfOctets	The value of the object sapIgQosPlcyForwardedInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
forwardedInProfPackets	UINT128	sapIgQosPlcyForwardedInProfPackets	The value of the object sapIgQosPlcyForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
forwardedOutProfOctets	UINT128	sapIgQosPlcyForwardedOutProfOctets	The value of the object sapIgQosPlcyForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
forwardedOutProfPackets	UINT128	sapIgQosPlcyForwardedOutProfPackets	The value of the object sapIgQosPlcyForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
policyId	long	sapIgQosPlcyId	The value of the object sapIgQosPlcyId indicates the row index in the tSapIngressTable corresponding to this ingress QoS policy, or one if no policy is specified.
SapIngQosQueueStats MIB table name: TIMETRA-SAP-MIB.sapIngQosQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
customerId	long	sapIngQosCustId	The Customer ID for the associated service.

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5620 SAM counter name	Type	MIB counter name	Description
droppedHiPrioOctets	UINT128	sapIngQosQueueStatsDroppedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedHiPrioPackets	UINT128	sapIngQosQueueStatsDroppedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioOctets	UINT128	sapIngQosQueueStatsDroppedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioPackets	UINT128	sapIngQosQueueStatsDroppedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapIngQosQueueStatsForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
forwardedInProfPackets	UINT128	sapIngQosQueueStatsForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
forwardedOutProfOctets	UINT128	sapIngQosQueueStatsForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
forwardedOutProfPackets	UINT128	sapIngQosQueueStatsForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
offeredHiPrioOctets	UINT128	sapIngQosQueueStatsOfferedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredHiPrioPackets	UINT128	sapIngQosQueueStatsOfferedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredLoPrioOctets	UINT128	sapIngQosQueueStatsOfferedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredLoPrioPackets	UINT128	sapIngQosQueueStatsOfferedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
queueId	long	sapIngQosQueueId	The index of the ingress QoS queue of this SAP.
uncoloredOctetsOffered	UINT128	sapIngQosQueueStatsUncoloredOctetsOffered	The number of uncolored octets offered to the ingress Qchip.
uncoloredPacketsOffered	UINT128	sapIngQosQueueStatsUncoloredPacketsOffered	The number of uncolored packets offered to the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
SapIngQosSchedStats MIB table name: TIMETRA-SAP-MIB.sapIngQosSchedStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
customerId	long	sapIngQosSchedCustId	The Customer ID for the associated service.
forwardedOctets	UINT128	sapIngQosSchedStatsForwardedOctets	The number of forwarded octets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
forwardedPackets	UINT128	sapIngQosSchedStatsForwardedPackets	The number of forwarded packets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
qosSchedName	String	sapIngQosSchedName	The index of the ingress QoS scheduler of this SAP.
SapIngSchedPlcyPortStats MIB table name: TIMETRA-SAP-MIB.sapIngSchedPlcyPortStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapIngSchedPlcyPortStatsFwdOct	The value of sapIngSchedPlcyPortStatsFwdOct indicates the number of forwarded octets,as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
forwardedPackets	UINT128	sapIngSchedPlcyPortStatsFwdPkt	The value of sapIngSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
SapIngSchedPlcyStats MIB table name: TIMETRA-SAP-MIB.sapIngSchedPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapIngSchedPlcyStatsFwdOct	The number of forwarded octets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
forwardedPackets	UINT128	sapIngSchedPlcyStatsFwdPkt	The number of forwarded packets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
VdoGrpSrcAdiStats MIB table name: TIMETRA-VIDEO-MIB.tmnxVdoSGAdiStatTable Monitored class: service.ZoneAdiChl			
vdoSGAdiAbortReq	long	tmnxVdoSGAdiAbortReq	The value of tmnxVdoSGAdiAbortReq indicates the total number of abort requests received from the Ad Insert (ADI) server.

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5620 SAM counter name	Type	MIB counter name	Description
vdoSGAdiAliveReq	long	tmnxVdoSGAdiAliveReq	The value of tmnxVdoSGAdiAliveReq indicates the total number of alive messages received from the Ad Insert (ADI) server.
vdoSGAdiCueReq	long	tmnxVdoSGAdiCueReq	The value of tmnxVdoSGAdiCueReq indicates the total number of total number of cue requests sent to the Ad Insert (ADI) server.
vdoSGAdiInitReq	long	tmnxVdoSGAdiInitReq	The value of tmnxVdoSGAdiInitReq indicates the total number of init requests received from the Ad Insert (ADI) server.
vdoSGAdiServerAddr	String	tmnxVdoSGAdiServerAddr	The value of tmnxVdoSGAdiServerAddr indicates the address of Ad Insert (ADI) server on this channel.
vdoSGAdiServerAddrType	int	tmnxVdoSGAdiServerAddrType	The value of tmnxVdoSGAdiServerAddrType indicates the type of Ad Insert (ADI) server address represented by tmnxVdoSGAdiServerAddr.
vdoSGAdiServerUptime	long	tmnxVdoSGAdiServerUptime	The value of tmnxVdoSGAdiServerUptime indicates the time in seconds since the connection with Ad Insert (ADI) server was established.
vdoSGAdiSpliceReq	long	tmnxVdoSGAdiSpliceReq	The value of tmnxVdoSGAdiSpliceReq indicates the total number of splice requests received from the Ad Insert (ADI) server.
vdoSGAdiSucAbortResp	long	tmnxVdoSGAdiSucAbortResp	The value of tmnxVdoSGAdiSucAbortResp indicates the total number of successful abort responses sent to the Ad Insert (ADI) server.
vdoSGAdiSucAliveResp	long	tmnxVdoSGAdiSucAliveResp	The value of tmnxVdoSGAdiSucAliveResp indicates the total number of successful alive messages sent to the Ad Insert (ADI) server.
vdoSGAdiSucCueResp	long	tmnxVdoSGAdiSucCueResp	The value of tmnxVdoSGAdiSucCueResp indicates the total number of successful cue responses received from the Ad Insert (ADI) server.
vdoSGAdiSucInitResp	long	tmnxVdoSGAdiSucInitResp	The value of tmnxVdoSGAdiSucInitResp indicates the total number of successful init responses sent to the Ad Insert (ADI) server.
vdoSGAdiSucSpliceInCompResp	long	tmnxVdoSGAdiSucSpliceInCompResp	The value of tmnxVdoSGAdiSucSpliceInCompResp indicates the total number of successful splice-in complete responses sent to the Ad Insert (ADI) server.
vdoSGAdiSucSpliceOutCompResp	long	tmnxVdoSGAdiSucSpliceOutCompResp	The value of tmnxVdoSGAdiSucSpliceOutCompResp indicates the total number of successful splice-out complete responses sent to the Ad Insert (ADI) server.

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5620 SAM counter name	Type	MIB counter name	Description
vdoSGAdiSucSpliceResp	long	tmnxVdoSGAdiSucSpliceResp	The value of tmnxVdoSGAdiSucSpliceResp indicates the total number of successful splice responses sent to the Ad Insert (ADI) server.
vdoSGAdiUnknownSCTE30Req	long	tmnxVdoSGAdiUnknownSCTE30Req	The value of tmnxVdoSGAdiUnknownSCTE30Req indicates the total number of invalid Society of Cable Telecommunications Engineers 30 (SCTE-30) requests received from the Ad Insert (ADI) server.
vdoSGAdiUnsucAbortResp	long	tmnxVdoSGAdiUnsucAbortResp	The value of tmnxVdoSGAdiUnsucAbortResp indicates the total number of unsuccessful abort responses sent to the Ad Insert (ADI) server.
vdoSGAdiUnSucAliveResp	long	tmnxVdoSGAdiUnSucAliveResp	The value of tmnxVdoSGAdiUnSucAliveResp indicates the total number of unsuccessful alive messages sent to the Ad Insert (ADI) server.
vdoSGAdiUnsucCueResp	long	tmnxVdoSGAdiUnsucCueResp	The value of tmnxVdoSGAdiUnsucCueResp indicates the total number of unsuccessful cue responses received from the Ad Insert (ADI) server.
vdoSGAdiUnsucInitResp	long	tmnxVdoSGAdiUnsucInitResp	The value of tmnxVdoSGAdiUnsucInitResp indicates the total number of unsuccessful init responses sent to the Ad Insert (ADI) server.
vdoSGAdiUnsucSpliceOutComRes	long	tmnxVdoSGAdiUnsucSpliceOutComRes	The value of tmnxVdoSGAdiUnsucSpliceOutComRes indicates the total number of unsuccessful splice-out complete responses sent to the Ad Insert (ADI) server.
vdoSGAdiUnsucSpliceResp	long	tmnxVdoSGAdiUnsucSpliceResp	The value of tmnxVdoSGAdiUnsucSpliceResp indicates the total number of unsuccessful splice responses sent to the Ad Insert (ADI) server.
VdoGrpSrcSpliceStats MIB table name: TIMETRA-VIDEO-MIB.tmnxVdoSGSpliceStatusTable Monitored class: service.ZoneAdiChl			
vdoSGSpliceAbortReason	long	tmnxVdoSGSpliceAbortReason	The value of tmnxVdoSGSpliceAbortReason indicates the reason if a splice operation has been aborted. If the value of this object is equal to 'none', then the splice has not been aborted.
vdoSGSpliceAdServerAddr	String	tmnxVdoSGSpliceAdServerAddr	The value of tmnxVdoSGSpliceAdServerAddr indicates the address of the Ad Insert (ADI) server that issued the splice request.

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5620 SAM counter name	Type	MIB counter name	Description
vdoSGSpliceAdServerAddrType	int	tmnxVdoSGSpliceAdServerAddrType	The value of tmnxVdoSGSpliceAdServerAddrType indicates the type of Ad Insert (ADI) server address represented by tmnxVdoSGSpliceAdServerAddr.
vdoSGSpliceBlkFramePTS	String	tmnxVdoSGSpliceBlkFramePTS	The value of tmnxVdoSGSpliceBlkFramePTS indicates the Presentation Timestamp (PTS) of the first black frame.
vdoSGSpliceDurationPlayed	long	tmnxVdoSGSpliceDurationPlayed	The value of tmnxVdoSGSpliceDurationPlayed indicates the splice duration, in seconds, played by the splicer.
vdoSGSpliceDurationReq	long	tmnxVdoSGSpliceDurationReq	The value of tmnxVdoSGSpliceDurationReq indicates the splice duration, in seconds, of the ad requested by the Ad Insert (ADI) server.
vdoSGSpliceMaxAdPTS	String	tmnxVdoSGSpliceMaxAdPTS	The value of tmnxVdoSGSpliceMaxAdPTS indicates the maximum Presentation Timestamp (PTS) value of the last Group of Pictures (GOP) of ad stream (non-black frame).
vdoSGSpliceMinNwPTS	String	tmnxVdoSGSpliceMinNwPTS	The value of tmnxVdoSGSpliceMinNwPTS indicates the minimum Presentation Timestamp (PTS) value from the first Group of Pictures (GOP) of the network stream after the splice out has occured.
vdoSGSpliceNumBlkFrames	long	tmnxVdoSGSpliceNumBlkFrames	The value of tmnxVdoSGSpliceNumBlkFrames indicates the number of black frames inserted.
vdoSGSplicePriorSessionId	long	tmnxVdoSGSplicePriorSessionId	The value of tmnxVdoSGSplicePriorSessionId indicates the prior session id of the ad. If the value of this object is not equal to 0xFFFFFFFF, then this splice is a back-to-back ad insertion.
vdoSGSpliceRate	long	tmnxVdoSGSpliceRate	The value of tmnxVdoSGSpliceRate indicates the rate of the ad stream, in kilo-bits per second (kbps), received by the splicer.
vdoSGSpliceSessionId	long	tmnxVdoSGSpliceSessionId	The value of tmnxVdoSGSpliceSessionId indicates the session ID of the ad request.
vdoSGSpliceSpliceInSeqNum	long	tmnxVdoSGSpliceSpliceInSeqNum	The value of tmnxVdoSGSpliceSpliceInSeqNum indicates the sequence number at which the splice-in to the ad occurred.
vdoSGSpliceSpliceOutSeqNum	long	tmnxVdoSGSpliceSpliceOutSeqNum	The value of tmnxVdoSGSpliceSpliceOutSeqNum indicates the sequence number at which the splice-out to the ad occurred.
vdoSGSpliceStartTime	long	tmnxVdoSGSpliceStartTime	The value of tmnxVdoSGSpliceStartTime indicates the start time of splice in seconds.
vdoSGSpliceStatus	long	tmnxVdoSGSpliceStatus	The value of tmnxVdoSGSpliceStatus indicates the status of this splice request.

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5620 SAM counter name	Type	MIB counter name	Description
VdoGrpSrcStats MIB table name: TIMETRA-VIDEO-MIB.tmnxVdoGrpSrcStatTable Monitored classes: • service.AdiChl • service.ZoneAdiChl			
vdoGrpSrcADIAdminState	int	tmnxVdoGrpSrcADIAdminState	The value of tmnxVdoGrpSrcADIAdminState indicates whether Ad Insertion is enabled on the video ISA.
vdoGrpSrcADICurrentState	long	tmnxVdoGrpSrcADICurrentState	The value of tmnxVdoGrpSrcADICurrentState indicates whether the video ISA is transmitting network stream or ads.
vdoGrpSrcADIPATChanges	long	tmnxVdoGrpSrcADIPATChanges	The value of tmnxVdoGrpSrcADIPATChanges indicates the total number of Program Association Table (PAT) version changes.
vdoGrpSrcADIPATVersion	long	tmnxVdoGrpSrcADIPATVersion	The value of tmnxVdoGrpSrcADIPATVersion indicates the version of the Program Association Table (PAT).
vdoGrpSrcADIPMTChanges	long	tmnxVdoGrpSrcADIPMTChanges	The value of tmnxVdoGrpSrcADIPMTChanges indicates the total number of Program Map Table (PMT) version changes.
vdoGrpSrcADIPMTVersion	long	tmnxVdoGrpSrcADIPMTVersion	The value of tmnxVdoGrpSrcADIPMTVersion indicates the version of the Program Map Table (PMT).
vdoGrpSrcADIRxPackets	UINT128	tmnxVdoGrpSrcADIRxPackets	The value of tmnxVdoGrpSrcADIRxPackets indicates the total number of Ad Insert (ADI) packets received by the video ISA.
vdoGrpSrcADIRxSCTE35MsgDisc	long	tmnxVdoGrpSrcADIRxSCTE35MsgDisc	The value of tmnxVdoGrpSrcADIRxSCTE35MsgDisc indicates the total number of Society of Cable Telecommunications Engineers (SCTE-35) messages received by the video ISA and discarded. SCTE-35 messages with unsupported commands and encrypted SCTE-35 messages are discarded.
vdoGrpSrcADIRxSCTE35MsgEnc	long	tmnxVdoGrpSrcADIRxSCTE35MsgEnc	The value of tmnxVdoGrpSrcADIRxSCTE35MsgEnc indicates the total number of encrypted Society of Cable Telecommunications Engineers (SCTE-35) messages received by the video ISA.
vdoGrpSrcADIRxSCTE35Msgs	long	tmnxVdoGrpSrcADIRxSCTE35Msgs	The value of tmnxVdoGrpSrcADIRxSCTE35Msgs indicates the total number of Society of Cable Telecommunications Engineers (SCTE-35) messages received by the video ISA.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpSrcADIRxSCTE35MsgUnsup	long	tmnxVdoGrpSrcADIRxSCTE35MsgUnsup	The value of tmnxVdoGrpSrcADIRxSCTE35MsgUnsup indicates the total number of unsupported Society of Cable Telecommunications Engineers (SCTE-35) messages received by the video ISA.
vdoGrpSrcADITxPackets	UINT128	tmnxVdoGrpSrcADITxPackets	The value of tmnxVdoGrpSrcADITxPackets indicates the total number of Ad Insert (ADI) packets sent by the video ISA.
vdoGrpSrcADIUnsuppTSLenPkts	long	tmnxVdoGrpSrcADIUnsuppTSLenPkts	The value of tmnxVdoGrpSrcADIUnsuppTSLenPkts indicates the total number of data packets received whose size is not equal to 188 bytes. The value of this object is valid only when the corresponding tmnxVdoGrpADIServerState value is set to 'true'.
vdoGrpSrcAdminBW	long	tmnxVdoGrpSrcAdminBW	The value of tmnxVdoGrpSrcAdminBW indicates the administrative bandwidth of the multicast group.
vdoGrpSrcAdminRTBufferSize	long	tmnxVdoGrpSrcAdminRTBufferSize	The value of tmnxVdoGrpSrcAdminRTBufferSize indicates the number of milliseconds worth of channel packets to store for the Retransmission (RT) server.
vdoGrpSrcBufferSize	long	tmnxVdoGrpSrcBufferSize	The value of tmnxVdoGrpSrcBufferSize indicates the number of milliseconds worth of channel packets stored by the Retransmission (RT) server or Fast Channel Change (FCC) server on this channel.
vdoGrpSrcDupSeqNumber	long	tmnxVdoGrpSrcDupSeqNumber	The value of tmnxVdoGrpSrcDupSeqNumber indicates the total number of Real-time Transport Protocol (RTP) packets detected with a duplicate sequence number.
vdoGrpSrcFCCSrvrAdminState	int	tmnxVdoGrpSrcFCCSrvrAdminState	The value of tmnxVdoGrpSrcFCCSrvrAdminState indicates whether the Fast Channel Change (FCC) server is enabled on this channel.
vdoGrpSrcFCCSrvrChnlType	int	tmnxVdoGrpSrcFCCSrvrChnlType	The value of tmnxVdoGrpSrcFCCSrvrChnlType indicates the type of channel served by the Fast Channel Change (FCC) server.
vdoGrpSrcFCCSrvrRxFailedReq	long	tmnxVdoGrpSrcFCCSrvrRxFailedReq	The value of tmnxVdoGrpSrcFCCSrvrRxFailedReq indicates the total number of failed requests at the Fast Channel Change (FCC) server.
vdoGrpSrcFCCSrvrRxFCCReq	long	tmnxVdoGrpSrcFCCSrvrRxFCCReq	The value of tmnxVdoGrpSrcFCCSrvrRxFCCReq indicates the total number of Fast Channel Change (FCC) requests received by the FCC server.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpSrcFCCSrvrTxBytes	UINT128	tmnxVdoGrpSrcFCCSrvrTxBytes	The value of tmnxVdoGrpSrcFCCSrvrTxBytes indicates the total number of bytes sent by the Fast Channel Change (FCC) server.
vdoGrpSrcFCCSrvrTxFCCReplies	long	tmnxVdoGrpSrcFCCSrvrTxFCCReplies	The value of tmnxVdoGrpSrcFCCSrvrTxFCCReplies indicates the total number of Fast Channel Change (FCC) replies sent by the FCC server.
vdoGrpSrcFCCSrvrTxPackets	UINT128	tmnxVdoGrpSrcFCCSrvrTxPackets	The value of tmnxVdoGrpSrcFCCSrvrTxPackets indicates the total number of packets sent by the Fast Channel Change (FCC) server.
vdoGrpSrcGroupAddress	String	tmnxVdoGrpSrcGroupAddress	The value of tmnxVdoGrpSrcGroupAddress indicates the IP multicast group address for which this entry contains information.
vdoGrpSrcGrpAddrType	int	tmnxVdoGrpSrcGrpAddrType	The value of tmnxVdoGrpSrcGrpAddrType indicates the type of IP multicast group address represented by tmnxVdoGrpSrcGroupAddress.
vdoGrpSrcRTClientAdminState	int	tmnxVdoGrpSrcRTClientAdminState	The value of tmnxVdoGrpSrcRTClientAdminState indicates the administrative state of the retransmission client.
vdoGrpSrcRTClientFailedReq	long	tmnxVdoGrpSrcRTClientFailedReq	The value of tmnxVdoGrpSrcRTClientFailedReq indicates the total number of Retransmission (RT) requests that could not be generated by the RT client due to gaps in the sequence numbers.
vdoGrpSrcRTClientGapsDetectd	long	tmnxVdoGrpSrcRTClientGapsDetectd	The value of tmnxVdoGrpSrcRTClientGapsDetectd indicates the total number of gaps in the sequence numbers detected by the Retransmission (RT) client.
vdoGrpSrcRTClientRTSrvrPort	long	tmnxVdoGrpSrcRTClientRTSrvrPort	The value of tmnxVdoGrpSrcRTClientRTSrvrPort indicates the Retransmission (RT) server port for this channel.
vdoGrpSrcRTClientRxReTxBytes	UINT128	tmnxVdoGrpSrcRTClientRxReTxBytes	The value of tmnxVdoGrpSrcRTClientRxReTxBytes indicates the total number of retransmitted bytes received by the Retransmission (RT) client.
vdoGrpSrcRTClientRxReTxPkts	UINT128	tmnxVdoGrpSrcRTClientRxReTxPkts	The value of tmnxVdoGrpSrcRTClientRxReTxPkts indicates the total number of retransmitted packets received by the Retransmission (RT) client.
vdoGrpSrcRTClientTxRTReq	long	tmnxVdoGrpSrcRTClientTxRTReq	The value of tmnxVdoGrpSrcRTClientTxRTReq indicates the total number of Retransmission (RT) requests sent by the RT client.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpSrcRTClientTxRTReqReTx	long	tmnxVdoGrpSrcRTClientTxRTReqReTx	The value of tmnxVdoGrpSrcRTClientTxRTReqReTx indicates the total number of repeat Retransmission (RT) requests attempted by the RT client.
vdoGrpSrcRTClntRTSvrAddr	String	tmnxVdoGrpSrcRTClntRTSvrAddr	The value of tmnxVdoGrpSrcRTClntRTSvrAddr indicates the address of the Retransmission (RT) server for this channel.
vdoGrpSrcRTClntRTSvrAddrType	int	tmnxVdoGrpSrcRTClntRTSvrAddrType	The value of tmnxVdoGrpSrcRTClntRTSvrAddrType indicates the type of address represented by tmnxVdoGrpSrcRTClntRTSvrAddr.
vdoGrpSrcRTSrvrAdminState	int	tmnxVdoGrpSrcRTSrvrAdminState	The value of tmnxVdoGrpSrcRTSrvrAdminState indicates the administrative state of the Retransmission (RT) server.
vdoGrpSrcRTSrvrRtpPktsReq	long	tmnxVdoGrpSrcRTSrvrRtpPktsReq	The value of tmnxVdoGrpSrcRTSrvrRtpPktsReq indicates the totoal number of Real-time Transport Protocol (RTP) packets requested in the Real-time Transport Control Protocol (RTCP) feedback (FB) messages received on this channel.
vdoGrpSrcRTSrvrRxFailedReq	long	tmnxVdoGrpSrcRTSrvrRxFailedReq	The value of tmnxVdoGrpSrcRTSrvrRxFailedReq indicates the total number of failed requests at the Retransmission (RT) server due to congestion or lack of resources.
vdoGrpSrcRTSrvrRxRTReq	long	tmnxVdoGrpSrcRTSrvrRxRTReq	The value of tmnxVdoGrpSrcRTSrvrRxRTReq indicates the total number of RT requests received by the Retransmission (RT) server.
vdoGrpSrcRTSrvrTxBytes	UINT128	tmnxVdoGrpSrcRTSrvrTxBytes	The value of tmnxVdoGrpSrcRTSrvrTxBytes indicates the total number of bytes sent by the Retransmission (RT) server.
vdoGrpSrcRTSrvrTxPackets	UINT128	tmnxVdoGrpSrcRTSrvrTxPackets	The value of tmnxVdoGrpSrcRTSrvrTxPackets indicates the total number of packets sent by the Retransmission (RT) server.
vdoGrpSrcRTSrvrTxRTReplies	long	tmnxVdoGrpSrcRTSrvrTxRTReplies	The value of tmnxVdoGrpSrcRTSrvrTxRTReplies indicates the total number of Retransmission (RT) replies sent by the RT server.
vdoGrpSrcRxBytes	UINT128	tmnxVdoGrpSrcRxBytes	The value of tmnxVdoGrpSrcRxBytes indicates the total number of bytes received on this multicast channel.
vdoGrpSrcRxInvalidPackets	UINT128	tmnxVdoGrpSrcRxInvalidPackets	The value of tmnxVdoGrpSrcRxInvalidPackets indicates the total number of invalid packets received on this multicast channel.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpSrcRxPackets	UINT128	tmnxVdoGrpSrcRxPackets	The value of tmnxVdoGrpSrcRxPackets indicates the total number of packets received on this multicast channel.
vdoGrpSrcSourceAddress	String	tmnxVdoGrpSrcSourceAddress	The value of tmnxVdoGrpSrcSourceAddress indicates the IP multicast source address for which this entry contains information.
vdoGrpSrcSrcAddrType	int	tmnxVdoGrpSrcSrcAddrType	The value of tmnxVdoGrpSrcSrcAddrType indicates the type of IP multicast source address represented by tmnxVdoGrpSrcSourceAddress.
vdoGrpSrcSSRCId	long	tmnxVdoGrpSrcSSRCId	The value of tmnxVdoGrpSrcSSRCId indicates the synchronization source (SSRC) identifier carried in the Real-time Transport Protocol (RTP) header to identify the source of a stream of RTP packets.
vdoGrpSrcStreamType	long	tmnxVdoGrpSrcStreamType	The value of tmnxVdoGrpSrcStreamType indicates the type of stream being transmitted from the video ISA perspective. Network stream is the stream ingressing the video ISA and being stored by it. Zone stream is the stream egressing the video ISA into which AD streams will be inserted.
vdoGrpSrcTxBytes	UINT128	tmnxVdoGrpSrcTxBytes	The value of tmnxVdoGrpSrcTxBytes indicates the total number of bytes transmitted on this multicast channel.
vdoGrpSrcTxFailedPackets	UINT128	tmnxVdoGrpSrcTxFailedPackets	The value of tmnxVdoGrpSrcTxFailedPackets indicates the total number of failures during the transmission of packets on this multicast channel. Failure happens when the packet to be sent is not stored in the video cache.
vdoGrpSrcTxPackets	UINT128	tmnxVdoGrpSrcTxPackets	The value of tmnxVdoGrpSrcTxPackets indicates the total number of packets transmitted on this multicast channel.
vdoGrpSrcUDPDestPort	long	tmnxVdoGrpSrcUDPDestPort	The value of tmnxVdoGrpSrcUDPDestPort indicates the UDP destination port in the received RTP multicast stream.
vdoGrpSrcUDPSrcPort	long	tmnxVdoGrpSrcUDPSrcPort	The value of tmnxVdoGrpSrcUDPSrcPort indicates the UDP source port in the received RTP multicast stream.
vdoGrpSrcUptime	long	tmnxVdoGrpSrcUptime	The value of tmnxVdoGrpSrcUptime indicates the time since this source group entry was created.
vdoGrpSrcVdoGrpId	long	tmnxVdoGrpSrcVdoGrpId	The value of tmnxVdoGrpSrcVdoGrpId indicates the identifier of the video group.
VdoIfStats MIB table name: TIMETRA-VIDEO-MIB.tmnxVdoIfStatTable Monitored class: service.VideoIfIpAddress			

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5620 SAM counter name	Type	MIB counter name	Description
vdoIfScte30InitSessions	long	tmnxVdoIfScte30InitSessions	The value of tmnxVdoIfScte30InitSessions indicates the total number of scte30 init sessions with the Ad Insert (ADI) servers for this interface.
vdoIfScte30TcpSessions	long	tmnxVdoIfScte30TcpSessions	The value of tmnxVdoIfScte30TcpSessions indicates the total number of scte30 tcp sessions with the Ad Insert (ADI) servers for this interface.
vdoIfStatFCCSrRxHdFailedReq	UINT128	tmnxVdoIfStatFCCSrRxHdFailedReq	The value of tmnxVdoIfStatFCCSrRxHdFailedReq indicates the total number of failed Fast Channel Change (FCC) requests received from High Definition (HD) channels on this interface.
vdoIfStatFCCSrRxHdFCCReq	UINT128	tmnxVdoIfStatFCCSrRxHdFCCReq	The value of tmnxVdoIfStatFCCSrRxHdFCCReq indicates the total number of Fast Channel Change (FCC) requests received from High Definition (HD) channels on this interface.
vdoIfStatFCCSrRxPipFailedReq	UINT128	tmnxVdoIfStatFCCSrRxPipFailedReq	The value of tmnxVdoIfStatFCCSrRxPipFailedReq indicates the total number of failed Fast Channel Change (FCC) requests received from Picture-In-Picture (PIP) channels on this interface.
vdoIfStatFCCSrRxPipFCCReq	UINT128	tmnxVdoIfStatFCCSrRxPipFCCReq	The value of tmnxVdoIfStatFCCSrRxPipFCCReq indicates the total number of Fast Channel Change (FCC) requests received from Picture-In-Picture (PIP) channels on this interface.
vdoIfStatFCCSrRxSdFailedReq	UINT128	tmnxVdoIfStatFCCSrRxSdFailedReq	The value of tmnxVdoIfStatFCCSrRxSdFailedReq indicates the total number of failed Fast Channel Change (FCC) requests received from Standard Definition (SD) channels on this interface.
vdoIfStatFCCSrRxSdFCCReq	UINT128	tmnxVdoIfStatFCCSrRxSdFCCReq	The value of tmnxVdoIfStatFCCSrRxSdFCCReq indicates the total number of Fast Channel Change (FCC) requests received from Standard Definition (SD) channels on this interface.
vdoIfStatFCCSrTxHdBytes	UINT128	tmnxVdoIfStatFCCSrTxHdBytes	The value of tmnxVdoIfStatFCCSrTxHdBytes indicates the total number of High Definition (HD) channel bytes sent from this interface.
vdoIfStatFCCSrTxHdFCCReplies	UINT128	tmnxVdoIfStatFCCSrTxHdFCCReplies	The value of tmnxVdoIfStatFCCSrTxHdFCCReplies indicates the total number of High Definition (HD) channel Fast Channel Change (FCC) replies sent from this interface.

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5620 SAM counter name	Type	MIB counter name	Description
vdoIfStatFCCSrTxHdPackets	UINT128	tmnxVdoIfStatFCCSrTxHdPackets	The value of tmnxVdoIfStatFCCSrTxHdPackets indicates the total number of High Definition (HD) channel packets sent from this interface.
vdoIfStatFCCSrTxPipBytes	UINT128	tmnxVdoIfStatFCCSrTxPipBytes	The value of tmnxVdoIfStatFCCSrTxPipBytes indicates the total number of Picture-In-Picture (PIP) channel bytes sent from this interface.
vdoIfStatFCCSrTxPipFCCRplies	UINT128	tmnxVdoIfStatFCCSrTxPipFCCRplies	The value of tmnxVdoIfStatFCCSrTxPipFCCRplies indicates the total number of Picture-In-Picture (PIP) channel Fast Channel Change (FCC) replies sent from this interface.
vdoIfStatFCCSrTxPipPackets	UINT128	tmnxVdoIfStatFCCSrTxPipPackets	The value of tmnxVdoIfStatFCCSrTxPipPackets indicates the total number of Picture-In-Picture (PIP) channel packets sent from this interface.
vdoIfStatFCCSrTxSdBytes	UINT128	tmnxVdoIfStatFCCSrTxSdBytes	The value of tmnxVdoIfStatFCCSrTxSdBytes indicates the total number of Standard Definition (SD) channel bytes sent from this interface.
vdoIfStatFCCSrTxSdFCCReplies	UINT128	tmnxVdoIfStatFCCSrTxSdFCCReplies	The value of tmnxVdoIfStatFCCSrTxSdFCCReplies indicates the total number of Standard Definition (SD) channel Fast Channel Change (FCC) replies sent from this interface.
vdoIfStatFCCSrTxSdPackets	UINT128	tmnxVdoIfStatFCCSrTxSdPackets	The value of tmnxVdoIfStatFCCSrTxSdPackets indicates the total number of Standard Definition (SD) channel packets sent from this interface.
vdoIfStatHdFCCServerMode	int	tmnxVdoIfStatHdFCCServerMode	The value of tmnxVdoIfStatHdFCCServerMode indicates the mode of the High Definition (HD) Fast Channel Change (FCC) server on this interface.
vdoIfStatHdRTServerState	boolean	tmnxVdoIfStatHdRTServerState	The value of tmnxVdoIfStatHdRTServerState indicates whether the High Definition (HD) retransmission server is enabled on this interface.
vdoIfStatPipFCCServerMode	int	tmnxVdoIfStatPipFCCServerMode	The value of tmnxVdoIfStatPipFCCServerMode indicates the mode of the Picture-in-Picture (PIP) Fast Channel Change (FCC) server on this interface.
vdoIfStatPipRTServerState	boolean	tmnxVdoIfStatPipRTServerState	The value of tmnxVdoIfStatPipRTServerState indicates whether the Picture-in-Picture (PIP) retransmission server is enabled on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
vdoIfStatRTSvrHdRtpPktsReq	UINT128	tmnxVdoIfStatRTSvrHdRtpPktsReq	The value of tmnxVdoIfStatRTSvrHdRtpPktsReq indicates the total number of High Definition (HD) channel Real-time Transport Protocol (RTP) packets requested in the Real-time Transport Control Protocol (RTCP) feedback (FB) messages received on this interface.
vdoIfStatRTSvrPipRtpPktsReq	UINT128	tmnxVdoIfStatRTSvrPipRtpPktsReq	The value of tmnxVdoIfStatRTSvrPipRtpPktsReq indicates the total number of Picture-In-Picture (PIP) channel Real-time Transport Protocol (RTP) packets requested in the Real-time Transport Control Protocol (RTCP) feedback (FB) messages received on this interface.
vdoIfStatRTSvrRxHdFailedReq	UINT128	tmnxVdoIfStatRTSvrRxHdFailedReq	The value of tmnxVdoIfStatRTSvrRxHdFailedReq indicates the total number of failed Retransmission (RT) requests received from High Definition (HD) channels on this interface.
vdoIfStatRTSvrRxHdRTReq	UINT128	tmnxVdoIfStatRTSvrRxHdRTReq	The value of tmnxVdoIfStatRTSvrRxHdRTReq indicates the total number of Retransmission (RT) requests received from High Definition (HD) channels on this interface.
vdoIfStatRTSvrRxPipFailedReq	UINT128	tmnxVdoIfStatRTSvrRxPipFailedReq	The value of tmnxVdoIfStatRTSvrRxPipFailedReq indicates the total number of failed Retransmission (RT) requests received from Picture-In-Picture (PIP) channels on this interface.
vdoIfStatRTSvrRxPipRTReq	UINT128	tmnxVdoIfStatRTSvrRxPipRTReq	The value of tmnxVdoIfStatRTSvrRxPipRTReq indicates the total number of Retransmission (RT) requests received from Picture-In-Picture (PIP) channels on this interface.
vdoIfStatRTSvrRxSdFailedReq	UINT128	tmnxVdoIfStatRTSvrRxSdFailedReq	The value of tmnxVdoIfStatRTSvrRxSdFailedReq indicates the total number of failed Retransmission (RT) requests received from Standard Definition (SD) channels on this interface.
vdoIfStatRTSvrRxSdRTReq	UINT128	tmnxVdoIfStatRTSvrRxSdRTReq	The value of tmnxVdoIfStatRTSvrRxSdRTReq indicates the total number of Retransmission (RT) requests received from Standard Definition (SD) channels on this interface.
vdoIfStatRTSvrSdRtpPktsReq	UINT128	tmnxVdoIfStatRTSvrSdRtpPktsReq	The value of tmnxVdoIfStatRTSvrSdRtpPktsReq indicates the total number of Standard Definition (SD) channel Real-time Transport Protocol (RTP) packets requested in the Real-time Transport Control Protocol (RTCP) feedback (FB) messages received on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
vdoIfStatRTSvrTxHdBytes	UINT128	tmnxVdoIfStatRTSvrTxHdBytes	The value of tmnxVdoIfStatRTSvrTxHdBytes indicates the total number of High Definition (HD) channel bytes sent from this interface.
vdoIfStatRTSvrTxHdPackets	UINT128	tmnxVdoIfStatRTSvrTxHdPackets	The value of tmnxVdoIfStatRTSvrTxHdPackets indicates the total number of High Definition (HD) channel packets sent from this interface.
vdoIfStatRTSvrTxHdRTReplies	UINT128	tmnxVdoIfStatRTSvrTxHdRTReplies	The value of tmnxVdoIfStatRTSvrTxHdRTReplies indicates the total number of High Definition (HD) channel Retransmission (RT) replies sent from this interface.
vdoIfStatRTSvrTxPipBytes	UINT128	tmnxVdoIfStatRTSvrTxPipBytes	The value of tmnxVdoIfStatRTSvrTxPipBytes indicates the total number of Picture-In-Picture (PIP) channel bytes sent from this interface.
vdoIfStatRTSvrTxPipPackets	UINT128	tmnxVdoIfStatRTSvrTxPipPackets	The value of tmnxVdoIfStatRTSvrTxPipPackets indicates the total number of Picture-In-Picture (PIP) channel packets sent from this interface.
vdoIfStatRTSvrTxPipRTReplies	UINT128	tmnxVdoIfStatRTSvrTxPipRTReplies	The value of tmnxVdoIfStatRTSvrTxPipRTReplies indicates the total number of Picture-In-Picture (PIP) channel Retransmission (RT) replies sent from this interface.
vdoIfStatRTSvrTxSdBytes	UINT128	tmnxVdoIfStatRTSvrTxSdBytes	The value of tmnxVdoIfStatRTSvrTxSdBytes indicates the total number of Standard Definition (SD) channel bytes sent from this interface.
vdoIfStatRTSvrTxSdPackets	UINT128	tmnxVdoIfStatRTSvrTxSdPackets	The value of tmnxVdoIfStatRTSvrTxSdPackets indicates the total number of Standard Definition (SD) channel packets sent from this interface.
vdoIfStatRTSvrTxSdRTReplies	UINT128	tmnxVdoIfStatRTSvrTxSdRTReplies	The value of tmnxVdoIfStatRTSvrTxSdRTReplies indicates the total number of Standard Definition (SD) channel Retransmission (RT) replies sent from this interface.
vdoIfStatSdFCCServerMode	int	tmnxVdoIfStatSdFCCServerMode	The value of tmnxVdoIfStatSdFCCServerMode indicates the mode of the Standard Definition (SD) Fast Channel Change (FCC) server on this interface.
vdoIfStatSdRTServerState	boolean	tmnxVdoIfStatSdRTServerState	The value of tmnxVdoIfStatSdRTServerState indicates whether the Standard Definition (SD) retransmission server is enabled on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
vdoIfStatTxFailedPackets	UINT128	tmnxVdoIfStatTxFailedPackets	The value of tmnxVdoIfStatTxFailedPackets indicates the total number of failures during the transmission of packets from this video interface. Failure happens when the packet to be sent is not stored in the video cache.

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Table E-29 sitesec statistics

5620 SAM counter name	Type	MIB counter name	Description
CpmFilterQueueStats MIB table name: TIMETRA-SECURITY-MIB.tCpmFilterQueueStatsTable Monitored class: sitesec.CpmFilterQueue			
droppedInOctets	UINT128	tCpmFilterQInProfileDropOctets	The value of tCpmFilterQInProfileDropOctets indicates the number of octets complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedInPackets	UINT128	tCpmFilterQInProfileDropPkts	The value of tCpmFilterQInProfileDropPkts indicates the number of packets complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedOutOctets	UINT128	tCpmFilterQOutProfileDropOctets	The value of tCpmFilterQOutProfileDropOctets indicates the number of octets not complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedOutPackets	UINT128	tCpmFilterQOutProfileDropPkts	The value of tCpmFilterQOutProfileDropPkts indicates the number of packets not complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
forwardedInOctets	UINT128	tCpmFilterQInProfileFwdOctets	The value of tCpmFilterQInProfileFwdOctets indicates the number of octets complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedInPackets	UINT128	tCpmFilterQInProfileFwdPkts	The value of tCpmFilterQInProfileFwdPkts indicates the number of packets complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.

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5620 SAM counter name	Type	MIB counter name	Description
forwardedOutOctets	UINT128	tCpmFilterQOutProfileFwdOctets	The value of tCpmFilterQOutProfileFwdOctets indicates the number of octets not complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedOutPackets	UINT128	tCpmFilterQOutProfileFwdPkts	The value of tCpmFilterQOutProfileFwdPkts indicates the number of packets not complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
CpmIpFilterStats MIB table name: TIMETRA-SECURITY-MIB.tCpmIpFilterStatsTable Monitored class: sitesec.CpmIpFilterEntry			
droppedPackets	UINT128	tCpmIpFilterStatsDroppedPkts	The value of tCpmIpFilterStatsDroppedPkts indicates the number of packets dropped due to the tCpmIpFilterEntry with the same index.
forwardedPackets	UINT128	tCpmIpFilterStatsForwardedPkts	The value of tCpmIpFilterStatsForwardedPkts indicates the number of packets forwarded due to the tCpmIpFilterEntry with the same index.
CpmMacFilterStats MIB table name: TIMETRA-SECURITY-MIB.tCpmMacFilterStatsTable Monitored class: sitesec.CpmMacFilterEntry			
droppedPackets	UINT128	tCpmMacFilterStatsDroppedPkts	The value of tCpmMacFilterStatsDroppedPkts indicates the number of packets dropped due to the tCpmMacFilterEntry with the same index.
forwardedPackets	UINT128	tCpmMacFilterStatsForwardedPkts	The value of tCpmMacFilterStatsForwardedPkts indicates the number of packets forwarded due to the tCpmMacFilterEntry with the same index.
MafEntryStats MIB table name: TIMETRA-SECURITY-MIB.tmnxIPMafMatchTable Monitored class: sitesec.MafEntry			
matchCount	UINT128	tmnxIPMafMatchCount	The value of tmnxIPMafMatchCount indicates the number of times a management packet has matched this filter entry.

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Table E-30 sonetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
SonetFarEndLineCurrentStats MIB table name: SONET-MIB.sonetFarEndLineCurrentTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetFarEndLineCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
erroredSeconds	long	sonetFarEndLineCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
severelyErroredSeconds	long	sonetFarEndLineCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
unavailableSeconds	long	sonetFarEndLineCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
SonetFarEndLineIntervalStats MIB table name: SONET-MIB.sonetFarEndLineIntervalTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetFarEndLineIntervalCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetFarEndLineIntervalESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetFarEndLineIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetFarEndLineIntervalSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.

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5620 SAM counter name	Type	MIB counter name	Description
unavailableSeconds	long	sonetFarEndLineIntervalUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
SonetFarEndPathCurrentStats MIB table name: SONET-MIB.sonetFarEndPathCurrentTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
erroredSeconds	long	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
severelyErroredSeconds	long	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
unavailableSeconds	long	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
SonetFarEndPathIntervalStats MIB table name: SONET-MIB.sonetFarEndPathIntervalTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetFarEndPathIntervalCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetFarEndPathIntervalESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.

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5620 SAM counter name	Type	MIB counter name	Description
intervalNumber	int	sonetFarEndPathIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetFarEndPathIntervalSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetFarEndPathIntervalUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
SonetLineCurrentStats MIB table name: SONET-MIB.sonetLineCurrentTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetLineCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in the current 15 minute interval.
currentStatus	long	sonetLineCurrentStatus	This variable indicates the status of the interface. The sonetLineCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetLineNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetLineNoDefect 2 sonetLineAIS 4 sonetLineRDI.
erroredSeconds	long	sonetLineCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
severelyErroredSeconds	long	sonetLineCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
unavailableSeconds	long	sonetLineCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
SonetLineIntervalStats MIB table name: SONET-MIB.sonetLineIntervalTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetLineIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.

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5620 SAM counter name	Type	MIB counter name	Description
erroredSeconds	long	sonetLineIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetLineIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetLineIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetLineIntervalUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
SonetPathCurrentStats MIB table name: SONET-MIB.sonetPathCurrentTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.
currentStatus	long	sonetPathCurrentStatus	This variable indicates the status of the interface. The sonetPathCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetPathNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetPathNoDefect 2 sonetPathSTSLOP 4 sonetPathSTSAIS 8 sonetPathSTSRDI 16 sonetPathUnequipped 32 sonetPathSignalLabelMismatch.
currentWidth	int	sonetPathCurrentWidth	A value that indicates the type of the SONET/SDH Path. For SONET, the assigned types are the STS-Nc SPEs, where N = 1, 3, 12, 24, 48, 192 and 768. STS-1 is equal to 51.84 Mbps. For SDH, the assigned types are the STM-Nc VCs, where N = 1, 4, 16, 64 and 256.
erroredSeconds	long	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.

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5620 SAM counter name	Type	MIB counter name	Description
severelyErroredSeconds	long	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
unavailableSeconds	long	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.
SonetPathIntervalStats MIB table name: SONET-MIB.sonetPathIntervalTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetPathIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetPathIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetPathIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetPathIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetPathIntervalUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in a particular 15-minute interval in the past 24 hours.
SonetSectionCurrentStats MIB table name: SONET-MIB.sonetSectionCurrentTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetSectionCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in the current 15 minute interval.

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5620 SAM counter name	Type	MIB counter name	Description
currentStatus	long	sonetSectionCurrentStatus	This variable indicates the status of the interface. The sonetSectionCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetSectionNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetSectionNoDefect 2 sonetSectionLOS 4 sonetSectionLOF.
erroredSeconds	long	sonetSectionCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
severelyErroredFramingSeconds	long	sonetSectionCurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
severelyErroredSeconds	long	sonetSectionCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
SonetSectionIntervalStats MIB table name: SONET-MIB.sonetSectionIntervalTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetSectionIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetSectionIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetSectionIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredFramingSeconds	long	sonetSectionIntervalSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
severelyErroredSeconds	long	sonetSectionIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.

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Table E-31 subscrauth statistics

5620 SAM counter name	Type	MIB counter name	Description
PolicyStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAuthPlcyStatsTable Monitored class: subscrauth.Policy			
rejectedAuthentications	long	tmnxSubAuthPlcyReject	The value of tmnxSubAuthPlcyReject indicates how many subscriber messages (e.g. DHCP, PPPoE, ...) were rejected by the authentication. Note that not all requests are therefore forwarded to radius. If several requests are sent in a short timeframe, only the first one is sent to radius.
successfulAuthentications	long	tmnxSubAuthPlcySuccess	The value of tmnxSubAuthPlcySuccess indicates how many subscriber messages (e.g. DHCP, PPPoE, ...) were authenticated successfully. Note that not all requests are therefore forwarded to radius. If several requests are sent in a short timeframe, only the first one is sent to radius.
RadiusEntryStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAuthPlcyRadStatsTable Monitored class: subscrauth.RadiusEntry			
failedAuthenticationRequests	long	tmnxSubAuthPlcyRadSendFail	The value of tmnxSubAuthPlcyRadSendFail indicates how many authentication requests failed because the packet could not be sent out.
md5VerificationFailedRequests	long	tmnxSubAuthPlcyRadMd5Fail	The value of tmnxSubAuthPlcyRadMd5Fail indicates how many times the MD5 verification failed on a msg from this radius server.
pendingAuthenticationRequest	long	tmnxSubAuthPlcyRadPending	The value of tmnxSubAuthPlcyRadPending indicates how many authentication requests are currently pending.
rejectedAuthenticationRequests	long	tmnxSubAuthPlcyRadReject	The value of tmnxSubAuthPlcyRadReject indicates how many authentication requests were rejected by this radius server.
successfulAuthenticationRequests	long	tmnxSubAuthPlcyRadSuccess	The value of tmnxSubAuthPlcyRadSuccess indicates how many authentication requests were accepted by this radius server.
timedOutAuthenticationRequests	long	tmnxSubAuthPlcyRadTimeout	The value of tmnxSubAuthPlcyRadTimeout indicates how many times this radius did not reply to an authentication request within the timeout.

Table E-32 svq statistics

5620 SAM counter name	Type	MIB counter name	Description
CustMultiSvcSiteEgrSchedPlcyPortStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteEgrSchedPlcyPortStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custEgrSchedPlcyPortStatsFwdOct	The value of custEgrSchedPlcyPortStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site egress scheduler policy.
forwardedPackets	UINT128	custEgrSchedPlcyPortStatsFwdPkt	The value of custEgrSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site egress scheduler policy.
portID	long	custEgrSchedPlcyPortStatsPort	The value of custEgrSchedPlcyPortStatsPort is used as an index of the egress QoS scheduler of this customer multi service site. When an MSS assignment is an aps/ccag/lag in 'link' mode, each member-port of the aps/ccag/lag has its own scheduler. This object refers to the TmnxPortID of these member-ports.
CustMultiSvcSiteEgrSchedPlcyStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteEgrSchedPlcyStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custEgrSchedPlcyStatsFwdOct	The value of the object custEgrSchedPlcyStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site egress scheduler policy.
forwardedPackets	UINT128	custEgrSchedPlcyStatsFwdPkt	The value of the object custEgrSchedPlcyStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site egress scheduler policy.
CustMultiSvcSiteIngSchedPlcyPortStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteIngSchedPlcyPortStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custIngSchedPlcyPortStatsFwdOct	The value of custIngSchedPlcyPortStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site ingress scheduler policy.
forwardedPackets	UINT128	custIngSchedPlcyPortStatsFwdPkt	The value of custIngSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site ingress scheduler policy.

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5620 SAM counter name	Type	MIB counter name	Description
portID	long	custIngSchedPlcyPortStatsPort	The value of custIngSchedPlcyPortStatsPort is used as an index of the ingress QoS scheduler of this customer multi service site. When an MSS assignment is an aps/ccag/lag in 'link' mode, each member-port of the aps/ccag/lag has its own scheduler. This object refers to the TmnxPortID of these member-ports.
CustMultiSvcSiteIngSchedPlcyStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteIngSchedPlcyStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custIngSchedPlcyStatsFwdOct	The value of the object custIngSchedPlcyStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site ingress scheduler policy.
forwardedPackets	UINT128	custIngSchedPlcyStatsFwdPkt	The value of the object custIngSchedPlcyStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site ingress scheduler policy.

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Table E-33 svt statistics

5620 SAM counter name	Type	MIB counter name	Description
MirrorSdpBindingStats MIB table name: TIMETRA-SDP-MIB.sdpBindBaseStatsTable Monitored class: svt.MirrorSdpBinding			
egressForwardedOctets	UINT128	sdpBindBaseStatsEgressForwardedOctets	.
egressForwardedPackets	UINT128	sdpBindBaseStatsEgressForwardedPackets	.
ingressDroppedOctets	UINT128	sdpBindBaseStatsIngDropOctets	.
ingressDroppedPackets	UINT128	sdpBindBaseStatsIngressDroppedPackets	.
ingressForwardedOctets	UINT128	sdpBindBaseStatsIngFwdOctets	.
ingressForwardedPackets	UINT128	sdpBindBaseStatsIngressForwardedPackets	.
SdpBindingBaseStats MIB table name: TIMETRA-SDP-MIB.sdpBindBaseStatsTable Monitored classes: • svt.SpokeSdpBinding • svt.MeshSdpBinding			
egressForwardedOctets	UINT128	sdpBindBaseStatsEgressForwardedOctets	.

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5620 SAM counter name	Type	MIB counter name	Description
egressForwardedPackets	UINT128	sdpBindBaseStatsEgressForwardedPackets	.
ingressDroppedOctets	UINT128	sdpBindBaseStatsIngDropOctets	.
ingressDroppedPackets	UINT128	sdpBindBaseStatsIngressDroppedPackets	.
ingressForwardedOctets	UINT128	sdpBindBaseStatsIngFwdOctets	.
ingressForwardedPackets	UINT128	sdpBindBaseStatsIngressForwardedPackets	.
SdpBindingIgmpSnpgErrorStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sdpBindIgmpSnpgStatsTable Monitored classes: • svt.SpokeSdpBinding • svt.MeshSdpBinding			
sdpBndIgmpSnpgImportPolicyDrops	long	sdpBndIgmpSnpgImportPolicyDrops	The value of the object sdpBndIgmpSnpgImportPolicyDrops indicates the number of times an IGMP Group or Source is dropped because of applying an import policy on this SDP Bind.
sdpBndIgmpSnpgMaxNumGroupsDrops	long	sdpBndIgmpSnpgMaxNumGroupsDrops	The value of the object sdpBndIgmpSnpgMaxNumGroupsDrops indicates the number of times an IGMP Group is dropped because of exceeding the configured maximum number of groups on this SDP Bind.
sdpBndIgmpSnpgMaxNumSourcesDrops	long	sdpBndIgmpSnpgMaxNumSourcesDrops	The value of the object sdpBndIgmpSnpgMaxNumSourcesDrops indicates the number of times an IGMP Source is dropped because of exceeding the configured maximum number of sources per group on this SDP Bind.
sdpBndIgmpSnpgMcacPolicyDrops	long	sdpBndIgmpSnpgMcacPolicyDrops	The value of the object sdpBndIgmpSnpgMcacPolicyDrops indicates the number of times an IGMP Group is dropped because of applying a multicast CAC policy on this SDP Bind.
sdpBndIgmpSnpgRxBadEncodedPkts	long	sdpBndIgmpSnpgRxBadEncodedPkts	The value of the object sdpBndIgmpSnpgRxBadEncodedPkts indicates the number of IGMP packets dropped on this SDP Bind because of a bad encoding.
sdpBndIgmpSnpgRxBadIgmpChksmPkts	long	sdpBndIgmpSnpgRxBadIgmpChksmPkts	The value of the object sdpBndIgmpSnpgRxBadIgmpChksmPkts indicates the number of dropped IGMP packets on this SDP Bind because of a bad IGMP header checksum.
sdpBndIgmpSnpgRxBadIpChksmPkts	long	sdpBndIgmpSnpgRxBadIpChksmPkts	The value of the object sdpBndIgmpSnpgRxBadIpChksmPkts indicates the number of dropped IGMP packets on this SDP Bind because of a bad IPv4 header checksum.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndIgmpSnpgRxBadLenPkts	long	sdpBndIgmpSnpgRxBadLenPkts	The value of the object sdpBndIgmpSnpgRxBadLenPkts indicates the number of IGMP packets dropped on this SDP Bind because of a bad length.
sdpBndIgmpSnpgRxNoRtrAlertPkts	long	sdpBndIgmpSnpgRxNoRtrAlertPkts	The value of the object sdpBndIgmpSnpgRxNoRtrAlertPkts indicates the number of IGMP packets dropped on this SDP Bind because the Router Alert Option in the IP packet is not set.
sdpBndIgmpSnpgRxWrongVersionPkts	long	sdpBndIgmpSnpgRxWrongVersionPkts	The value of the object sdpBndIgmpSnpgRxWrongVersionPkts indicates the total number of IGMP packets with a wrong version received on this SDP Bind.
sdpBndIgmpSnpgRxZeroSrcAdrPkts	long	sdpBndIgmpSnpgRxZeroSrcAdrPkts	The value of the object sdpBndIgmpSnpgRxZeroSrcAdrPkts indicates the number of IGMP packets dropped on this SDP Bind because they contain a zero source IPv4 address.
sdpBndIgmpSnpgSendQueryCfgDrops	long	sdpBndIgmpSnpgSendQueryCfgDrops	The value of the object sdpBndIgmpSnpgSendQueryCfgDrops indicates the number of times an IGMP Query is dropped because the object sdpBndIgmpSnpgCfgSendQueries for this SDP Bind is set to 'enabled(1)'.
SdpBindingIgmpSnpgStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sdpBindIgmpSnpgStatsTable Monitored classes: • svt.SpokeSdpBinding • svt.MeshSdpBinding			
sdpBndIgmpSnpgFwdGenQueries	long	sdpBndIgmpSnpgFwdGenQueries	The value of the object sdpBndIgmpSnpgFwdGenQueries indicates the number of IGMP General Queries forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdGrpSpecQueries	long	sdpBndIgmpSnpgFwdGrpSpecQueries	The value of the object sdpBndIgmpSnpgFwdGrpSpecQueries indicates the number of IGMP Group-Specific Queries forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdSrcSpecQueries	long	sdpBndIgmpSnpgFwdSrcSpecQueries	The value of the object sdpBndIgmpSnpgFwdSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdUnknownType	long	sdpBndIgmpSnpgFwdUnknownType	The value of the object sdpBndIgmpSnpgFwdUnknownType indicates the number of IGMP unknown type packets forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdV1Reports	long	sdpBndIgmpSnpgFwdV1Reports	The value of the object sdpBndIgmpSnpgFwdV1Reports indicates the number of IGMPv1 Reports forwarded on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndIgmpSnpgFwdV2Leaves	long	sdpBndIgmpSnpgFwdV2Leaves	The value of the object sdpBndIgmpSnpgFwdV2Leaves indicates the number of IGMPv2 Leaves forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdV2Reports	long	sdpBndIgmpSnpgFwdV2Reports	The value of the object sdpBndIgmpSnpgFwdV2Reports indicates the number of IGMPv2 Reports forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdV3Reports	long	sdpBndIgmpSnpgFwdV3Reports	The value of the object sdpBndIgmpSnpgFwdV3Reports indicates the number of IGMPv3 Reports forwarded on this SDP Bind.
sdpBndIgmpSnpgRxGenQueries	long	sdpBndIgmpSnpgRxGenQueries	The value of the object sdpBndIgmpSnpgRxGenQueries indicates the number of IGMP General Queries received on this SDP Bind.
sdpBndIgmpSnpgRxGrpSpecQueries	long	sdpBndIgmpSnpgRxGrpSpecQueries	The value of the object sdpBndIgmpSnpgRxGrpSpecQueries indicates the number of IGMP Group-Specific Queries received on this SDP Bind.
sdpBndIgmpSnpgRxSrcSpecQueries	long	sdpBndIgmpSnpgRxSrcSpecQueries	The value of the object sdpBndIgmpSnpgRxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries received on this SDP Bind.
sdpBndIgmpSnpgRxUnknownType	long	sdpBndIgmpSnpgRxUnknownType	The value of the object sdpBndIgmpSnpgRxUnknownType indicates the number of IGMP unknown type packets received on this SDP Bind.
sdpBndIgmpSnpgRxV1Reports	long	sdpBndIgmpSnpgRxV1Reports	The value of the object sdpBndIgmpSnpgRxV1Reports indicates the number of IGMPv1 Reports received on this SDP Bind.
sdpBndIgmpSnpgRxV2Leaves	long	sdpBndIgmpSnpgRxV2Leaves	The value of the object sdpBndIgmpSnpgRxV2Leaves indicates the number of IGMPv2 Leaves received on this SDP Bind.
sdpBndIgmpSnpgRxV2Reports	long	sdpBndIgmpSnpgRxV2Reports	The value of the object sdpBndIgmpSnpgRxV2Reports indicates the number of IGMPv2 Reports received on this SDP Bind.
sdpBndIgmpSnpgRxV3Reports	long	sdpBndIgmpSnpgRxV3Reports	The value of the object sdpBndIgmpSnpgRxV3Reports indicates the number of IGMPv3 Reports received on this SDP Bind.
sdpBndIgmpSnpgTxGenQueries	long	sdpBndIgmpSnpgTxGenQueries	The value of the object sdpBndIgmpSnpgTxGenQueries indicates the number of IGMP General Queries transmitted on this SDP Bind.
sdpBndIgmpSnpgTxGrpSpecQueries	long	sdpBndIgmpSnpgTxGrpSpecQueries	The value of the object sdpBndIgmpSnpgTxGrpSpecQueries indicates the number of IGMP Group-Specific Queries transmitted on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndIgmpSnpgTxSrcSpecQueries	long	sdpBndIgmpSnpgTxSrcSpecQueries	The value of the object sdpBndIgmpSnpgTxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV1Reports	long	sdpBndIgmpSnpgTxV1Reports	The value of the object sdpBndIgmpSnpgTxV1Reports indicates the number of IGMPv1 Reports transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV2Leaves	long	sdpBndIgmpSnpgTxV2Leaves	The value of the object sdpBndIgmpSnpgTxV2Leaves indicates the number of IGMPv2 Leaves transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV2Reports	long	sdpBndIgmpSnpgTxV2Reports	The value of the object sdpBndIgmpSnpgTxV2Reports indicates the number of IGMPv2 Reports transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV3Reports	long	sdpBndIgmpSnpgTxV3Reports	The value of the object sdpBndIgmpSnpgTxV3Reports indicates the number of IGMPv3 Reports transmitted on this SDP Bind.
TunnelKeepAliveStats MIB table name: TIMETRA-SDP-MIB.sdpInfoTable Monitored class: svt.Tunnel			
lateHelloResponses	long	sdpKeepAliveNumLateHelloResponseMessages	The number of SDP Echo Response messages received after the corresponding Request timeout timer expired.
receivedHelloMessages	long	sdpKeepAliveNumHelloResponseMessages	The number of SDP Echo Response messages received since the keep-alive was administratively enabled or the counter was cleared.
transmittedHelloMessages	long	sdpKeepAliveNumHelloRequestMessages	The number of SDP Echo Request messages transmitted since the keep-alive was administratively enabled or the counter was cleared.

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Table E-34 vpls statistics

5620 SAM counter name	Type	MIB counter name	Description
CircuitDhcpRelayCfgStats MIB table name: TIMETRA-SDP-MIB.sdpBindDhcpStatsTable Monitored class: svt.SdpBinding			
sdpBindDhcpStatsClntDropdPckts	long	sdpBindDhcpStatsClntDropdPckts	The value of the object sdpBindDhcpStatsClntDropdPckts indicates the number of DHCP client packets that have been dropped on this SDP bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBindDhcpStatsClntForwdPckts	long	sdpBindDhcpStatsClntForwdPckts	The value of the object sdpBindDhcpStatsClntForwdPckts indicates the number of DHCP client packets that have been forwarded on this SDP bind.
sdpBindDhcpStatsClntProxLSPckts	long	sdpBindDhcpStatsClntProxLSPckts	The value of the object sdpBindDhcpStatsClntProxLSPckts indicates the number of DHCP client packets that have been proxied on this SDP bind based on a lease state. The lease itself can have been obtained from a DHCP or RADIUS server. This is the so called lease split functionality.
sdpBindDhcpStatsClntProxRadPckts	long	sdpBindDhcpStatsClntProxRadPckts	The value of the object sdpBindDhcpStatsClntProxRadPckts indicates the number of DHCP client packets that have been proxied on this SDP bind based on data received from a RADIUS server.
sdpBindDhcpStatsClntSnoopdPckts	long	sdpBindDhcpStatsClntSnoopdPckts	The value of the object sdpBindDhcpStatsClntSnoopdPckts indicates the number of DHCP client packets that have been snooped on this SDP bind.
sdpBindDhcpStatsGenForceRenPckts	long	sdpBindDhcpStatsGenForceRenPckts	The value of the object sdpBindDhcpStatsGenForceRenPckts indicates the number of DHCP FORCERENEW messages spoofed on this SDP bind to the DHCP clients.
sdpBindDhcpStatsGenReleasePckts	long	sdpBindDhcpStatsGenReleasePckts	The value of the object sdpBindDhcpStatsGenReleasePckts indicates the number of DHCP RELEASE messages spoofed on this SDP bind to the DHCP server.
sdpBindDhcpStatsSrvrDropdPckts	long	sdpBindDhcpStatsSrvrDropdPckts	The value of the object sdpBindDhcpStatsSrvrDropdPckts indicates the number of DHCP server packets that have been dropped on this SDP bind.
sdpBindDhcpStatsSrvrForwdPckts	long	sdpBindDhcpStatsSrvrForwdPckts	The value of the object sdpBindDhcpStatsSrvrForwdPckts indicates the number of DHCP server packets that have been forwarded on this SDP bind.
sdpBindDhcpStatsSrvrSnoopdPckts	long	sdpBindDhcpStatsSrvrSnoopdPckts	The value of the object sdpBindDhcpStatsSrvrSnoopdPckts indicates the number of DHCP server packets that have been snooped on this SDP bind.
InterfacePimSnoopingStats MIB table name: TIMETRA-PIM-SNOOPING-MIB.tmnxPimSnpgIfStatsTable Monitored class: vpls.InterfacePimSnooping			

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5620 SAM counter name	Type	MIB counter name	Description
tmnxPimSnpgIfJoinPolicyDrops	long	tmnxPimSnpgIfJoinPolicyDrops	The value of tmnxPimSnpgIfJoinPolicyDrops indicates the number of times the join policy match resulted in dropping PIM Join-Prune Message or one of the source group contained in the message.
tmnxPimSnpgIfRxBadChecksumDscrd	long	tmnxPimSnpgIfRxBadChecksumDscrd	The value of tmnxPimSnpgIfRxBadChecksumDscrd indicates the number of PIM messages received on this interface which were discarded because of bad checksum.
tmnxPimSnpgIfRxBadEncodings	long	tmnxPimSnpgIfRxBadEncodings	The value of tmnxPimSnpgIfRxBadEncodings indicates the number of PIM messages with bad encodings received on this interface.
tmnxPimSnpgIfRxBadVersionDscrd	long	tmnxPimSnpgIfRxBadVersionDscrd	The value of tmnxPimSnpgIfRxBadVersionDscrd indicates the number of PIM messages with bad versions received on this interface.
tmnxPimSnpgIfRxHellos	long	tmnxPimSnpgIfRxHellos	The value of tmnxPimSnpgIfRxHellos indicates the number of PIM hello messages received on this interface.
tmnxPimSnpgIfRxHellosDropped	long	tmnxPimSnpgIfRxHellosDropped	The value of tmnxPimSnpgIfRxHellosDropped indicates the number of PIM Hello messages which were received on this interface but were dropped.
tmnxPimSnpgIfRxJoinPruneErrs	long	tmnxPimSnpgIfRxJoinPruneErrs	The value of tmnxPimSnpgIfRxJoinPruneErrs indicates the number of errors while processing Join-Prune messages received on this interface.
tmnxPimSnpgIfRxJoinPrunes	long	tmnxPimSnpgIfRxJoinPrunes	The value of tmnxPimSnpgIfRxJoinPrunes indicates the number of PIM Join Prune messages received on this interface.
tmnxPimSnpgIfRxNbrUnknown	long	tmnxPimSnpgIfRxNbrUnknown	The value of tmnxPimSnpgIfRxNbrUnknown indicates the number of PIM messages (other than Hello messages) which were received on this interface and were rejected because the adjacency with the neighbor router was not already established.
tmnxPimSnpgIfRxPkts	long	tmnxPimSnpgIfRxPkts	The value of tmnxPimSnpgIfRxPkts indicates the number of multicast data packets received on this interface.
tmnxPimSnpgIfSGTypes	long	tmnxPimSnpgIfSGTypes	The value of tmnxPimSnpgIfSGTypes indicates the number of (S,G) entries in tmnxPimSnpgIfGrpSrcTable.
tmnxPimSnpgIfStarGTypes	long	tmnxPimSnpgIfStarGTypes	The value of tmnxPimSnpgIfStarGTypes indicates the number of (*,G) entries in tmnxPimSnpgIfGrpSrcTable.
tmnxPimSnpgIfTxJoinPrunes	long	tmnxPimSnpgIfTxJoinPrunes	The value of tmnxPimSnpgIfTxJoinPrunes indicates the number of PIM Join Prune messages transmitted on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
tmnxPimSnpgIfTxPkts	long	tmnxPimSnpgIfTxPkts	The value of tmnxPimSnpgIfTxPkts indicates the number of multicast data packets transmitted on this interface.
L2AccessInterfaceIgmpSnpgErrorStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sapIgmpSnpgStatsTable Monitored classes: • vpls.AbstractL2AccessInterface • vpls.IL2AccessInterface • mvpls.IL2AccessInterface			
sapIgmpSnpgImportPolicyDrops	long	sapIgmpSnpgImportPolicyDrops	The value of the object sapIgmpSnpgImportPolicyDrops indicates the number of times an IGMP Group or Source is dropped because of applying an import policy on this SAP.
sapIgmpSnpgMaxNumGroupsDrops	long	sapIgmpSnpgMaxNumGroupsDrops	The value of the object sapIgmpSnpgMaxNumGroupsDrops indicates the number of times an IGMP Group is dropped because of exceeding the configured maximum number of groups on this SAP.
sapIgmpSnpgMaxNumSourcesDrops	long	sapIgmpSnpgMaxNumSourcesDrops	The value of the object sapIgmpSnpgMaxNumSourcesDrops indicates the number of times an IGMP Source is dropped because of exceeding the configured maximum number of sources per group on this SAP.
sapIgmpSnpgMcacPolicyDrops	long	sapIgmpSnpgMcacPolicyDrops	The value of the object sapIgmpSnpgMcacPolicyDrops indicates the number of times an IGMP Group is dropped because of applying a multicast CAC policy on this SAP.
sapIgmpSnpgMcsFailures	long	sapIgmpSnpgMcsFailures	The value of the object sapIgmpSnpgMcsFailures indicates the number of times an IGMP Group on this SAP could not be synced to the MCS (multi-chassis synchronization) database.
sapIgmpSnpgRxBadEncodedPkts	long	sapIgmpSnpgRxBadEncodedPkts	The value of the object sapIgmpSnpgRxBadEncodedPkts indicates the number of IGMP packets dropped on this SAP because of a bad encoding.
sapIgmpSnpgRxBadIgmpChksmPkts	long	sapIgmpSnpgRxBadIgmpChksmPkts	The value of the object sapIgmpSnpgRxBadIgmpChksmPkts indicates the number of dropped IGMP packets on this SAP because of a bad IGMP header checksum.
sapIgmpSnpgRxBadIpChksmPkts	long	sapIgmpSnpgRxBadIpChksmPkts	The value of the object sapIgmpSnpgRxBadIpChksmPkts indicates the number of dropped IGMP packets on this SAP because of a bad IPv4 header checksum.
sapIgmpSnpgRxBadLenPkts	long	sapIgmpSnpgRxBadLenPkts	The value of the object sapIgmpSnpgRxBadLenPkts indicates the number of IGMP packets dropped on this SAP because of a bad length.

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgRxNoRtrAlertPkts	long	sapIgmpSnpgRxNoRtrAlertPkts	The value of the object sapIgmpSnpgRxNoRtrAlertPkts indicates the number of IGMP packets dropped on this SAP because the Router Alert Option in the IP packet is not set.
sapIgmpSnpgRxWrongVersionPkts	long	sapIgmpSnpgRxWrongVersionPkts	The value of the object sapIgmpSnpgRxWrongVersionPkts indicates the total number of IGMP packets with a wrong version received on this SAP.
sapIgmpSnpgRxZeroSrcAdrPkts	long	sapIgmpSnpgRxZeroSrcAdrPkts	The value of the object sapIgmpSnpgRxZeroSrcAdrPkts indicates the number of IGMP packets dropped on this SAP because they contain a zero source IPv4 address.
sapIgmpSnpgSendQueryCfgDrops	long	sapIgmpSnpgSendQueryCfgDrops	The value of the object sapIgmpSnpgSendQueryCfgDrops indicates the number of times an IGMP Query is dropped because the object sapIgmpSnpgCfgSendQueries for this SAP is set to 'enabled(1)'.
L2AccessInterfaceIgmpSnpgStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sapIgmpSnpgStatsTable Monitored classes: • vpls.AbstractL2AccessInterface • vpls.IL2AccessInterface • mvpls.IL2AccessInterface			
sapIgmpSnpgFwdGenQueries	long	sapIgmpSnpgFwdGenQueries	The value of the object sapIgmpSnpgFwdGenQueries indicates the number of IGMP General Queries forwarded on this SAP.
sapIgmpSnpgFwdGrpSpecQueries	long	sapIgmpSnpgFwdGrpSpecQueries	The value of the object sapIgmpSnpgFwdGrpSpecQueries indicates the number of IGMP Group-Specific Queries forwarded on this SAP.
sapIgmpSnpgFwdSrcSpecQueries	long	sapIgmpSnpgFwdSrcSpecQueries	The value of the object sapIgmpSnpgFwdSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries forwarded on this SAP.
sapIgmpSnpgFwdUnknownType	long	sapIgmpSnpgFwdUnknownType	The value of the object sapIgmpSnpgFwdUnknownType indicates the number of IGMP unknown type packets forwarded on this SAP.
sapIgmpSnpgFwdV1Reports	long	sapIgmpSnpgFwdV1Reports	The value of the object sapIgmpSnpgFwdV1Reports indicates the number of IGMPv1 Reports forwarded on this SAP.
sapIgmpSnpgFwdV2Leaves	long	sapIgmpSnpgFwdV2Leaves	The value of the object sapIgmpSnpgFwdV2Leaves indicates the number of IGMPv2 Leaves forwarded on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgFwdV2Reports	long	sapIgmpSnpgFwdV2Reports	The value of the object sapIgmpSnpgFwdV2Reports indicates the number of IGMPv2 Reports forwarded on this SAP.
sapIgmpSnpgFwdV3Reports	long	sapIgmpSnpgFwdV3Reports	The value of the object sapIgmpSnpgFwdV3Reports indicates the number of IGMPv3 Reports forwarded on this SAP.
sapIgmpSnpgRxGenQueries	long	sapIgmpSnpgRxGenQueries	The value of the object sapIgmpSnpgRxGenQueries indicates the number of IGMP General Queries received on this SAP.
sapIgmpSnpgRxGrpSpecQueries	long	sapIgmpSnpgRxGrpSpecQueries	The value of the object sapIgmpSnpgRxGrpSpecQueries indicates the number of IGMP Group-Specific Queries received on this SAP.
sapIgmpSnpgRxSrcSpecQueries	long	sapIgmpSnpgRxSrcSpecQueries	The value of the object sapIgmpSnpgRxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries received on this SAP.
sapIgmpSnpgRxUnknownType	long	sapIgmpSnpgRxUnknownType	The value of the object sapIgmpSnpgRxUnknownType indicates the number of IGMP unknown type packets received on this SAP.
sapIgmpSnpgRxV1Reports	long	sapIgmpSnpgRxV1Reports	The value of the object sapIgmpSnpgRxV1Reports indicates the number of IGMPv1 Reports received on this SAP.
sapIgmpSnpgRxV2Leaves	long	sapIgmpSnpgRxV2Leaves	The value of the object sapIgmpSnpgRxV2Leaves indicates the number of IGMPv2 Leaves received on this SAP.
sapIgmpSnpgRxV2Reports	long	sapIgmpSnpgRxV2Reports	The value of the object sapIgmpSnpgRxV2Reports indicates the number of IGMPv2 Reports received on this SAP.
sapIgmpSnpgRxV3Reports	long	sapIgmpSnpgRxV3Reports	The value of the object sapIgmpSnpgRxV3Reports indicates the number of IGMPv3 Reports received on this SAP.
sapIgmpSnpgTxGenQueries	long	sapIgmpSnpgTxGenQueries	The value of the object sapIgmpSnpgTxGenQueries indicates the number of IGMP General Queries transmitted on this SAP.
sapIgmpSnpgTxGrpSpecQueries	long	sapIgmpSnpgTxGrpSpecQueries	The value of the object sapIgmpSnpgTxGrpSpecQueries indicates the number of IGMP Group-Specific Queries transmitted on this SAP.
sapIgmpSnpgTxSrcSpecQueries	long	sapIgmpSnpgTxSrcSpecQueries	The value of the object sapIgmpSnpgTxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries transmitted on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgTxV1Reports	long	sapIgmpSnpgTxV1Reports	The value of the object sapIgmpSnpgTxV1Reports indicates the number of IGMPv1 Reports transmitted on this SAP.
sapIgmpSnpgTxV2Leaves	long	sapIgmpSnpgTxV2Leaves	The value of the object sapIgmpSnpgTxV2Leaves indicates the number of IGMPv2 Leaves transmitted on this SAP.
sapIgmpSnpgTxV2Reports	long	sapIgmpSnpgTxV2Reports	The value of the object sapIgmpSnpgTxV2Reports indicates the number of IGMPv2 Reports transmitted on this SAP.
sapIgmpSnpgTxV3Reports	long	sapIgmpSnpgTxV3Reports	The value of the object sapIgmpSnpgTxV3Reports indicates the number of IGMPv3 Reports transmitted on this SAP.
L2AccessInterfaceMldMvrStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sapMldSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapMldSnpgMvrFromVplsCfgDrops	long	sapMldSnpgMvrFromVplsCfgDrops	The value of the object sapMldSnpgMvrFromVplsCfgDrops indicates the number of times an MLD group or Query is dropped because of applying the sapMldSnpgCfgMvrFromVplsId configuration on this SAP.
sapMldSnpgMvrToSapCfgDrops	long	sapMldSnpgMvrToSapCfgDrops	The value of the object sapMldSnpgMvrToSapCfgDrops indicates the number times an MLD Report or Query is dropped because of applying the sapMldSnpgCfgMvrToSapPortId and sapMldSnpgCfgMvrToSapEncapVal configuration on this SAP.
L2AccessInterfaceMldSnpgErrorStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sapMldSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapMldSnpgImportPolicyDrops	long	sapMldSnpgImportPolicyDrops	The value of the object sapMldSnpgImportPolicyDrops indicates the number of times an MLD group or source is dropped because of applying an import policy on this SAP.
sapMldSnpgMaxNumGroupsDrops	long	sapMldSnpgMaxNumGroupsDrops	The value of the object sapMldSnpgMaxNumGroupsDrops indicates the number of times an MLD group is dropped because of exceeding the configured maximum number of groups on this SAP.
sapMldSnpgMcsFailures	long	sapMldSnpgMcsFailures	The value of the object sapMldSnpgMcsFailures indicates the number of times an MLD group on this SAP could not be synced to the MCS (multi-chassis synchronization) database.

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5620 SAM counter name	Type	MIB counter name	Description
sapMldSnpgRxBadEncodedPkts	long	sapMldSnpgRxBadEncodedPkts	The value of the object sapMldSnpgRxBadEncodedPkts indicates the number of MLD packets dropped on this SAP because of a bad encoding.
sapMldSnpgRxBadLenPkts	long	sapMldSnpgRxBadLenPkts	The value of the object sapMldSnpgRxBadLenPkts indicates the number of MLD packets dropped on this SAP because of a bad length.
sapMldSnpgRxBadMldChksmPkts	long	sapMldSnpgRxBadMldChksmPkts	The value of the object sapMldSnpgRxBadMldChksmPkts indicates the number of dropped MLD packets on this SAP because of a bad MLD header checksum.
sapMldSnpgRxNoRtrAlertPkts	long	sapMldSnpgRxNoRtrAlertPkts	The value of the object sapMldSnpgRxNoRtrAlertPkts indicates the number of MLD packets dropped on this SAP because the Router Alert Option in the IP packet is not set.
sapMldSnpgRxWrongVersionPkts	long	sapMldSnpgRxWrongVersionPkts	The value of the object sapMldSnpgRxWrongVersionPkts indicates the total number of MLD packets with a wrong version received on this SAP.
sapMldSnpgRxZeroSrcAdrPkts	long	sapMldSnpgRxZeroSrcAdrPkts	The value of the object sapMldSnpgRxZeroSrcAdrPkts indicates the number of MLD packets dropped on this SAP because they contain a zero source IPv6 address.
sapMldSnpgSendQueryCfgDrops	long	sapMldSnpgSendQueryCfgDrops	The value of the object sapMldSnpgSendQueryCfgDrops indicates the number of times an MLD Query is dropped because the object sapMldSnpgCfgSendQueries for this SAP is set to 'inService(2)'.
L2AccessInterfaceMldSnpgStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sapMldSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapMldSnpgFwdGenQueries	long	sapMldSnpgFwdGenQueries	The value of the object sapMldSnpgFwdGenQueries indicates the number of MLD General Queries forwarded on this SAP.
sapMldSnpgFwdGrpSpecQueries	long	sapMldSnpgFwdGrpSpecQueries	The value of the object sapMldSnpgFwdGrpSpecQueries indicates the number of MLD Group-Specific Queries forwarded on this SAP.
sapMldSnpgFwdSrcSpecQueries	long	sapMldSnpgFwdSrcSpecQueries	The value of the object sapMldSnpgFwdSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries forwarded on this SAP.
sapMldSnpgFwdUnknownType	long	sapMldSnpgFwdUnknownType	The value of the object sapMldSnpgFwdUnknownType indicates the number of MLD unknown type packets forwarded on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapMldSnpgFwdV1Leaves	long	sapMldSnpgFwdV1Leaves	The value of the object sapMldSnpgFwdV1Leaves indicates the number of MLDv1 Leaves forwarded on this SAP.
sapMldSnpgFwdV1Reports	long	sapMldSnpgFwdV1Reports	The value of the object sapMldSnpgFwdV1Reports indicates the number of MLDv1 Reports forwarded on this SAP.
sapMldSnpgFwdV2Reports	long	sapMldSnpgFwdV2Reports	The value of the object sapMldSnpgFwdV2Reports indicates the number of MLDv2 Reports forwarded on this SAP.
sapMldSnpgRxGenQueries	long	sapMldSnpgRxGenQueries	The value of the object sapMldSnpgRxGenQueries indicates the number of MLD General Queries received on this SAP.
sapMldSnpgRxGrpSpecQueries	long	sapMldSnpgRxGrpSpecQueries	The value of the object sapMldSnpgRxGrpSpecQueries indicates the number of MLD Group-Specific Queries received on this SAP.
sapMldSnpgRxLocalScopePkts	long	sapMldSnpgRxLocalScopePkts	The value of the object sapMldSnpgRxLocalScopePkts indicates the number of MLD packets received on the link-local scope IPv6 multicast address.
sapMldSnpgRxRsvdScopePkts	long	sapMldSnpgRxRsvdScopePkts	The value of the object sapMldSnpgRxRsvdScopePkts indicates the number of MLD packets received on the reserved scope IPv6 multicast address.
sapMldSnpgRxSrcSpecQueries	long	sapMldSnpgRxSrcSpecQueries	The value of the object sapMldSnpgRxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries received on this SAP.
sapMldSnpgRxUnknownType	long	sapMldSnpgRxUnknownType	The value of the object sapMldSnpgRxUnknownType indicates the number of MLD unknown type packets received on this SAP.
sapMldSnpgRxV1Leaves	long	sapMldSnpgRxV1Leaves	The value of the object sapMldSnpgRxV1Leaves indicates the number of MLDv1 Leaves received on this SAP.
sapMldSnpgRxV1Reports	long	sapMldSnpgRxV1Reports	The value of the object sapMldSnpgRxV1Reports indicates the number of MLDv1 Reports received on this SAP.
sapMldSnpgRxV2Reports	long	sapMldSnpgRxV2Reports	The value of the object sapMldSnpgRxV2Reports indicates the number of MLDv2 Reports received on this SAP.
sapMldSnpgTxGenQueries	long	sapMldSnpgTxGenQueries	The value of the object sapMldSnpgTxGenQueries indicates the number of MLD General Queries transmitted on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapMldSnpgTxGrpSpecQueries	long	sapMldSnpgTxGrpSpecQueries	The value of the object sapMldSnpgTxGrpSpecQueries indicates the number of MLD Group-Specific Queries transmitted on this SAP.
sapMldSnpgTxSrcSpecQueries	long	sapMldSnpgTxSrcSpecQueries	The value of the object sapMldSnpgTxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries transmitted on this SAP.
sapMldSnpgTxV1Leaves	long	sapMldSnpgTxV1Leaves	The value of the object sapMldSnpgTxV1Leaves indicates the number of MLDv1 Leaves transmitted on this SAP.
sapMldSnpgTxV1Reports	long	sapMldSnpgTxV1Reports	The value of the object sapMldSnpgTxV1Reports indicates the number of MLDv1 Reports transmitted on this SAP.
sapMldSnpgTxV2Reports	long	sapMldSnpgTxV2Reports	The value of the object sapMldSnpgTxV2Reports indicates the number of MLDv2 Reports transmitted on this SAP.
L2AccessInterfaceMvrStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sapIgmpSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapIgmpSnpgMvrFromVplsCfgDrops	long	sapIgmpSnpgMvrFromVplsCfgDrops	The value of the object sapIgmpSnpgMvrFromVplsCfgDrops indicates the number of times an IGMP Group or Query is dropped because of applying the sapIgmpSnpgCfgMvrFromVplsId configuration on this SAP.
sapIgmpSnpgMvrToSapCfgDrops	long	sapIgmpSnpgMvrToSapCfgDrops	The value of the object sapIgmpSnpgMvrToSapCfgDrops indicates the number times an IGMP Report or Query is dropped because of applying the sapIgmpSnpgCfgMvrToSapPortId and sapIgmpSnpgCfgMvrToSapEncapVal configuration on this SAP.
L2AccessItfDhcpRelayCfgStats MIB table name: TIMETRA-SAP-MIB.sapTlsDhcpStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapTlsDhcpStatsClntDropdPckts	long	sapTlsDhcpStatsClntDropdPckts	The value of the object sapTlsDhcpStatsClntDropdPckts indicates the number of DHCP client packets that have been dropped on this SAP.
sapTlsDhcpStatsClntForwdPckts	long	sapTlsDhcpStatsClntForwdPckts	The value of the object sapTlsDhcpStatsClntForwdPckts indicates the number of DHCP client packets that have been forwarded on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapTlsDhcpStatsClntProxLSPckts	long	sapTlsDhcpStatsClntProxLSPckts	The value of the object sapTlsDhcpStatsClntProxLSPckts indicates the number of DHCP client packets that have been proxied on this SAP based on a lease state. The lease itself can have been obtained from a DHCP or RADIUS server. This is the so called lease split functionality.
sapTlsDhcpStatsClntProxRadPckts	long	sapTlsDhcpStatsClntProxRadPckts	The value of the object sapTlsDhcpStatsClntProxRadPckts indicates the number of DHCP client packets that have been proxied on this SAP based on data received from a RADIUS server.
sapTlsDhcpStatsClntSnoopdPckts	long	sapTlsDhcpStatsClntSnoopdPckts	The value of the object sapTlsDhcpStatsClntSnoopdPckts indicates the number of DHCP client packets that have been snooped on this SAP.
sapTlsDhcpStatsGenForceRenPckts	long	sapTlsDhcpStatsGenForceRenPckts	The value of the object sapTlsDhcpStatsGenForceRenPckts indicates the number of DHCP FORCERENEW messages spoofed on this SAP to the DHCP clients.
sapTlsDhcpStatsGenReleasePckts	long	sapTlsDhcpStatsGenReleasePckts	The value of the object sapTlsDhcpStatsGenReleasePckts indicates the number of DHCP RELEASE messages spoofed on this SAP to the DHCP server.
sapTlsDhcpStatsSrvrDropdPckts	long	sapTlsDhcpStatsSrvrDropdPckts	The value of the object sapTlsDhcpStatsSrvrDropdPckts indicates the number of DHCP server packets that have been dropped on this SAP.
sapTlsDhcpStatsSrvrForwdPckts	long	sapTlsDhcpStatsSrvrForwdPckts	The value of the object sapTlsDhcpStatsSrvrForwdPckts indicates the number of DHCP server packets that have been forwarded on this SAP.
sapTlsDhcpStatsSrvrSnoopdPckts	long	sapTlsDhcpStatsSrvrSnoopdPckts	The value of the object sapTlsDhcpStatsSrvrSnoopdPckts indicates the number of DHCP server packets that have been snooped on this SAP.
SdpBindingMldSnpgErrorStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sdpBindMldSnpgStatsTable Monitored class: vpls.SdpBindingMldSnpgCfg			
sdpBndMldSnpgImportPolicyDrops	long	sdpBndMldSnpgImportPolicyDrops	The value of the object sdpBndMldSnpgImportPolicyDrops indicates the number of times an MLD group or source is dropped because of applying an import policy on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndMldSnpgMaxNumGroupsDrops	long	sdpBndMldSnpgMaxNumGroupsDrops	The value of the object sdpBndMldSnpgMaxNumGroupsDrops indicates the number of times an MLD group is dropped because of exceeding the configured maximum number of groups on this SDP Bind.
sdpBndMldSnpgRxBadEncodedPkts	long	sdpBndMldSnpgRxBadEncodedPkts	The value of the object sdpBndMldSnpgRxBadEncodedPkts indicates the number of MLD packets dropped on this SDP Bind because of a bad encoding.
sdpBndMldSnpgRxBadLenPkts	long	sdpBndMldSnpgRxBadLenPkts	The value of the object sdpBndMldSnpgRxBadLenPkts indicates the number of MLD packets dropped on this SDP Bind because of a bad length.
sdpBndMldSnpgRxBadMldChksmPkts	long	sdpBndMldSnpgRxBadMldChksmPkts	The value of the object sdpBndMldSnpgRxBadMldChksmPkts indicates the number of dropped MLD packets on this SDP Bind because of a bad MLD header checksum.
sdpBndMldSnpgRxLocalScopePkts	long	sdpBndMldSnpgRxLocalScopePkts	The value of the object sdpBndMldSnpgRxLocalScopePkts indicates the number of MLD packets received on the link-local scope IPv6 multicast address.
sdpBndMldSnpgRxNoRtrAlertPkts	long	sdpBndMldSnpgRxNoRtrAlertPkts	The value of the object sdpBndMldSnpgRxNoRtrAlertPkts indicates the number of MLD packets dropped on this SDP Bind because the Router Alert Option in the IP packet is not set.
sdpBndMldSnpgRxRsvdScopePkts	long	sdpBndMldSnpgRxRsvdScopePkts	The value of the object sdpBndMldSnpgRxRsvdScopePkts indicates the number of MLD packets received on the reserved scope IPv6 multicast address.
sdpBndMldSnpgRxWrongVersionPkts	long	sdpBndMldSnpgRxWrongVersionPkts	The value of the object sdpBndMldSnpgRxWrongVersionPkts indicates the total number of MLD packets with a wrong version received on this SDP Bind.
sdpBndMldSnpgRxZeroSrcAdrPkts	long	sdpBndMldSnpgRxZeroSrcAdrPkts	The value of the object sdpBndMldSnpgRxZeroSrcAdrPkts indicates the number of MLD packets dropped on this SDP Bind because they contain a zero source IPv6 address.
sdpBndMldSnpgSendQueryCfgDrops	long	sdpBndMldSnpgSendQueryCfgDrops	The value of the object sdpBndMldSnpgSendQueryCfgDrops indicates the number of times an MLD Query is dropped because the object sdpBndMldSnpgCfgSendQueries for this SDP Bind is set to 'inService(2)'.
SdpBindingMldSnpgStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sdpBindMldSnpgStatsTable Monitored class: vpls.SdpBindingMldSnpgCfg			

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndMldSnpgFwdGenQueries	long	sdpBndMldSnpgFwdGenQueries	The value of the object sdpBndMldSnpgFwdGenQueries indicates the number of MLD General Queries forwarded on this SDP Bind.
sdpBndMldSnpgFwdGrpSpecQueries	long	sdpBndMldSnpgFwdGrpSpecQueries	The value of the object sdpBndMldSnpgFwdGrpSpecQueries indicates the number of MLD Group-Specific Queries forwarded on this SDP Bind.
sdpBndMldSnpgFwdSrcSpecQueries	long	sdpBndMldSnpgFwdSrcSpecQueries	The value of the object sdpBndMldSnpgFwdSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries forwarded on this SDP Bind.
sdpBndMldSnpgFwdUnknownType	long	sdpBndMldSnpgFwdUnknownType	The value of the object sdpBndMldSnpgFwdUnknownType indicates the number of MLD unknown type packets forwarded on this SDP Bind.
sdpBndMldSnpgFwdV1Leaves	long	sdpBndMldSnpgFwdV1Leaves	The value of the object sdpBndMldSnpgFwdV1Leaves indicates the number of MLDv1 Leaves forwarded on this SDP Bind.
sdpBndMldSnpgFwdV1Reports	long	sdpBndMldSnpgFwdV1Reports	The value of the object sdpBndMldSnpgFwdV1Reports indicates the number of MLDv1 Reports forwarded on this SDP Bind.
sdpBndMldSnpgFwdV2Reports	long	sdpBndMldSnpgFwdV2Reports	The value of the object sdpBndMldSnpgFwdV2Reports indicates the number of MLDv2 Reports forwarded on this SDP Bind.
sdpBndMldSnpgRxGenQueries	long	sdpBndMldSnpgRxGenQueries	The value of the object sdpBndMldSnpgRxGenQueries indicates the number of MLD General Queries received on this SDP Bind.
sdpBndMldSnpgRxGrpSpecQueries	long	sdpBndMldSnpgRxGrpSpecQueries	The value of the object sdpBndMldSnpgRxGrpSpecQueries indicates the number of MLD Group-Specific Queries received on this SDP Bind.
sdpBndMldSnpgRxSrcSpecQueries	long	sdpBndMldSnpgRxSrcSpecQueries	The value of the object sdpBndMldSnpgRxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries received on this SDP Bind.
sdpBndMldSnpgRxUnknownType	long	sdpBndMldSnpgRxUnknownType	The value of the object sdpBndMldSnpgRxUnknownType indicates the number of MLD unknown type packets received on this SDP Bind.
sdpBndMldSnpgRxV1Leaves	long	sdpBndMldSnpgRxV1Leaves	The value of the object sdpBndMldSnpgRxV1Leaves indicates the number of MLDv1 Leaves received on this SDP Bind.
sdpBndMldSnpgRxV1Reports	long	sdpBndMldSnpgRxV1Reports	The value of the object sdpBndMldSnpgRxV1Reports indicates the number of MLDv1 Reports received on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndMldSnpgRxV2Reports	long	sdpBndMldSnpgRxV2Reports	The value of the object sdpBndMldSnpgRxV2Reports indicates the number of MLDv2 Reports received on this SDP Bind.
sdpBndMldSnpgTxGenQueries	long	sdpBndMldSnpgTxGenQueries	The value of the object sdpBndMldSnpgTxGenQueries indicates the number of MLD General Queries transmitted on this SDP Bind.
sdpBndMldSnpgTxGrpSpecQueries	long	sdpBndMldSnpgTxGrpSpecQueries	The value of the object sdpBndMldSnpgTxGrpSpecQueries indicates the number of MLD Group-Specific Queries transmitted on this SDP Bind.
sdpBndMldSnpgTxSrcSpecQueries	long	sdpBndMldSnpgTxSrcSpecQueries	The value of the object sdpBndMldSnpgTxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries transmitted on this SDP Bind.
sdpBndMldSnpgTxV1Leaves	long	sdpBndMldSnpgTxV1Leaves	The value of the object sdpBndMldSnpgTxV1Leaves indicates the number of MLDv1 Leaves transmitted on this SDP Bind.
sdpBndMldSnpgTxV1Reports	long	sdpBndMldSnpgTxV1Reports	The value of the object sdpBndMldSnpgTxV1Reports indicates the number of MLDv1 Reports transmitted on this SDP Bind.
sdpBndMldSnpgTxV2Reports	long	sdpBndMldSnpgTxV2Reports	The value of the object sdpBndMldSnpgTxV2Reports indicates the number of MLDv2 Reports transmitted on this SDP Bind.
SitePimSnoopingStats MIB table name: TIMETRA-PIM-SNOOPING-MIB.tmnxPimSnpgGenStatsTable Monitored class: vpls.SitePimSnooping			
numSGTypes	long	tmnxPimSnpgGenStatsSGTypes	The value of tmnxPimSnpgGenStatsSGTypes indicates the number of entries in tmnxPimSnpgGrpSrcTable for which the source type is 'sg'.
numStarGTypes	long	tmnxPimSnpgGenStatsStarGTypes	The value of tmnxPimSnpgGenStatsStarGTypes indicates the number of entries in tmnxPimSnpgGrpSrcTable for which the source type is 'starG'.
SiteSourceGroupRecordPimSnoopingStats MIB table name: TIMETRA-PIM-SNOOPING-MIB.tmnxPimSnpgGrpSrcStatsTable Monitored classes: • vpls.SiteSourceGroupRecord • vpls.SitePimSnooping			

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5620 SAM counter name	Type	MIB counter name	Description
tmnxPimSnpgGrpSrcStatsFwdedOct	long	tmnxPimSnpgGrpSrcStatsFwdedOct	The value of tmnxPimSnpgGrpSrcStatsFwdedOct indicates the number of multicast octets that were forwarded to the interfaces in the outgoing interface list. tmnxPimSnpgGrpSrcIfTable lists all the interfaces in the outgoing interface list.
tmnxPimSnpgGrpSrcStatsFwdedPkts	long	tmnxPimSnpgGrpSrcStatsFwdedPkts	The value of tmnxPimSnpgGrpSrcStatsFwdedPkts indicates the number of multicast packets that were forwarded to the interfaces in the outgoing interface list. tmnxPimSnpgGrpSrcIfTable lists all the interfaces in the outgoing interface list.

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Table E-35 vrrp statistics

5620 SAM counter name	Type	MIB counter name	Description
InstanceAdditionalStats MIB table name: TIMETRA-VRRP-MIB.tmnxVrrpRouterStatsTable Monitored class: vrrp.Instance			
addressListDiscards	long	tmnxVrrpStatsAddressListDiscards	The total number of VRRP advertisement packets discarded because the address list did not match the locally configured list for the virtual router.
advertiseIntervalDiscards	long	tmnxVrrpStatsAdvertiseIntervalDiscards	The total number of VRRP advertisement packets discarded because the advertisement interval in the received packet was different than the one configured for the local virtual router.
advertiseSent	long	tmnxVrrpStatsAdvertiseSent	The total number of VRRP advertisements sent by this virtual router.
masterChanges	long	tmnxVrrpStatsMasterChanges	The value for tmnxVrrpStatsMasterChanges specifies the total number of times the virtual router has seen the master virtual router change.
preemptedEvents	long	tmnxVrrpStatsPreemptedEvents	The value for tmnxVrrpStatsPreemptedEvents specifies the total number of times the virtual router has been preempted by another non-owner master with higher priority.
preemptEvents	long	tmnxVrrpStatsPreemptEvents	The value for tmnxVrrpStatsPreemptEvents specifies the total number of times the virtual router has preempted another non-owner master with lower priority.
totalDiscards	long	tmnxVrrpStatsTotalDiscards	The total number of VRRP advertisement packets discarded for any reason. This includes the packets discarded due to advertise interval mismatch and address list mismatch.

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5620 SAM counter name	Type	MIB counter name	Description
InstanceStats MIB table name: VRRP-MIB.vrrpRouterStatsTable Monitored class: vrrp.Instance			
addressListErrors	long	vrrpStatsAddressListErrors	The total number of packets received for which the address list does not match the locally configured list for the virtual router.
advertiseIntervalErrors	long	vrrpStatsAdvertiseIntervalErrors	The total number of VRRP advertisement packets received for which the advertisement interval is different than the one configured for the local virtual router.
advertiseRcvd	long	vrrpStatsAdvertiseRcvd	The total number of VRRP advertisements received by this virtual router.
authFailures	long	vrrpStatsAuthFailures	The total number of VRRP packets received that do not pass the authentication check.
authTypeMismatch	long	vrrpStatsAuthTypeMismatch	The total number of packets received with 'Auth Type' not equal to the locally configured authentication method (`vrrpOperAuthType').
becomeMaster	long	vrrpStatsBecomeMaster	The total number of times that this virtual router's state has transitioned to MASTER.
invalidAuthType	long	vrrpStatsInvalidAuthType	The total number of packets received with an unknown authentication type.
invalidTypePktsRcvd	long	vrrpStatsInvalidTypePktsRcvd	The number of VRRP packets received by the virtual router with an invalid value in the 'type' field.
ipTtlErrors	long	vrrpStatsIpTtlErrors	The total number of VRRP packets received by the virtual router with IP TTL (Time-To-Live) not equal to 255.
packetLengthErrors	long	vrrpStatsPacketLengthErrors	The total number of packets received with a packet length less than the length of the VRRP header.
priorityZeroPktsRcvd	long	vrrpStatsPriorityZeroPktsRcvd	The total number of VRRP packets received by the virtual router with a priority of '0'.
priorityZeroPktsSent	long	vrrpStatsPriorityZeroPktsSent	The total number of VRRP packets sent by the virtual router with a priority of '0'.

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F. 7701 CPAA Release 3.0 statistics counters

F.1 7701 CPAA Release 3.0 statistics counters F-2

F.1 7701 CPAA Release 3.0 statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for the 7701 CPAA, Release 3.0. Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.

Note 1 — The tables list the 5620 SAM-supported statistics counters for the current release of the device. Counters that are supported for a previous device release, but not for the current release, are not listed.

Note 2 — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table F-1 lists each statistics package and the associated statistics-counter table.

Table F-1 Statistics packages and counter tables

Package name	See
aclfilter	Table F-2
bgp	Table F-3
equipment	Table F-4
ethernetequipment	Table F-5
isis	Table F-6
ospf	Table F-7
rtr	Table F-8
sitesec	Table F-9

Table F-2 aclfilter statistics

5620 SAM counter name	Type	MIB counter name	Description
HitCountStats MIB table name: TIMETRA-FILTER-MIB.tIPFilterParamsTable Monitored class: aclfilter.IpFilterEntry			
egressHitCount	UINT128	tIPFilterParamsEgressHit Count	This object indicates the number of times an egress packet matched this entry.

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5620 SAM counter name	Type	MIB counter name	Description
ingressHitCount	UINT128	tIPFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.
MacHitCountStats MIB table name: TIMETRA-FILTER-MIB.tMacFilterParamsTable Monitored class: aclfilter.MacFilterEntry			
egressHitCount	UINT128	tMacFilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitCount	UINT128	tMacFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.

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Table F-3 bgp statistics

5620 SAM counter name	Type	MIB counter name	Description
PeerAdditionalStats MIB table name: BGP4-MIB.bgpPeerTable Monitored class: bgp.Peer			
fsmEstablishedTime	long	bgpPeerFsmEstablishedTime	This timer indicates how long (in seconds) this peer has been in the Established state or how long since this peer was last in the Established state. It is set to zero when a new peer is configured or the router is booted.
PeerStats MIB table name: TIMETRA-BGP-MIB.tBgpPeerNgOperTable Monitored class: bgp.Peer			
flaps	long	tBgpPeerNgOperFlaps	tBgpPeerNgOperFlaps indicates the number of flaps of updates from this peer.
inputQueueMessages	long	tBgpPeerNgOperInputQueueMsgs	tBgpPeerNgOperInputQueueMsgs indicates the number of unprocessed messages in the queue, from this peer.
lastEvent	long	tBgpPeerNgOperLastEvent	tBgpPeerNgOperLastEvent indicates the last BGP event of this peer.
lastRestartTime	long	tBgpPeerNgOperLastRestartTime	tBgpPeerNgOperLastRestartTime indicates the last time the peer attempted restart.
lastState	long	tBgpPeerNgOperLastState	tBgpPeerNgOperLastState indicates the last BGP state of this peer.
mcastActivePrefixes	long	tBgpPeerNgOperMCastV4ActivePfxs	The value of tBgpPeerNgOperMCastV4ActivePfxs indicates the number of active IPv4 multicast prefixes from this peer.
mcastPrefixesSuppressedByDamping	long	tBgpPeerNgOperMCastV4SuppPfxDamp	The value of tBgpPeerNgOperMCastV4SuppPfxDamp indicates the number of IPv4 multicast prefixes from this peer, which have been suppressed by damping.

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5620 SAM counter name	Type	MIB counter name	Description
mcastReceivedPrefixes	long	tBgpPeerNgOperMCastV4RecvPfxs	The value of tBgpPeerNgOperMCastV4RecvPfxs indicates the number of IPv4 multicast prefixes received from this peer.
mcastSentPrefixes	long	tBgpPeerNgOperMCastV4SentPfxs	The value of tBgpPeerNgOperMCastV4SentPfxs indicates the number of IPv4 multicast prefixes transmitted to this peer.
messageOctetsReceived	UINT128	tBgpPeerNgOperMsgOctetsRcvd	tBgpPeerNgOperMsgOctetsRcvd indicates the number of octets received from this peer.
messageOctetsSent	UINT128	tBgpPeerNgOperMsgOctetsSent	tBgpPeerNgOperMsgOctetsSent indicates the number of octets transmitted to this peer.
numberOfRestarts	long	tBgpPeerNgOperNumRestarts	tBgpPeerNgOperNumRestarts indicates the number of times the peer has attempted restart.
outputQueueMessages	long	tBgpPeerNgOperOutputQueueMsgs	tBgpPeerNgOperOutputQueueMsgs indicates the number of untransmitted messages in the queue, to this peer.
pathsReceived	long	tBgpPeerNgOperReceivedPaths	tBgpPeerNgOperReceivedPaths indicates the number of paths received from this peer.
prefixesActive	long	tBgpPeerNgOperActivePrefixes	tBgpPeerNgOperActivePrefixes indicates the number of active IPv4 prefixes from this peer.
prefixesReceived	long	tBgpPeerNgOperReceivedPrefixes	tBgpPeerNgOperReceivedPrefixes indicates the number of IPv4 prefixes received from this peer.
prefixesSent	long	tBgpPeerNgOperSentPrefixes	tBgpPeerNgOperSentPrefixes indicates the number of IPv4 prefixes transmitted to this peer.
prefixesSuppressedByDamping	long	tBgpPeerNgOperV4SuppPfxDamp	The value of tBgpPeerNgOperV4SuppPfxDamp indicates the number of IPv6 prefixes from this peer, which have been suppressed by damping.
v6ActivePrefixes	long	tBgpPeerNgOperV6ActivePrefixes	The value of tBgpPeerNgOperV6ActivePrefixes indicates the number of active IPv6 prefixes from this peer.
v6PrefixesSuppressedByDamping	long	tBgpPeerNgOperV6SuppPfxDamp	The value of tBgpPeerNgOperV6SuppPfxDamp indicates the number of IPv6 prefixes from this peer, which have been suppressed by damping.
v6ReceivedPrefixes	long	tBgpPeerNgOperV6ReceivedPrefixes	The value of tBgpPeerNgOperV6ReceivedPrefixes indicates the number of IPv6 prefixes received from this peer.
v6SentPrefixes	long	tBgpPeerNgOperV6SentPrefixes	The value of tBgpPeerNgOperV6SentPrefixes indicates the number of IPv6 prefixes transmitted to this peer.

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5620 SAM counter name	Type	MIB counter name	Description
vpnActivePrefixes	long	tBgpPeerNgOperVpnActivePrefixes	tBgpPeerNgOperVpnActivePrefixes indicates the number of active VPN IPv4 prefixes from this BGP peer.
vpnPrefixesSuppressedByDamping	long	tBgpPeerNgOperVpnSuppPfxDamp	The value of tBgpPeerNgOperVpnSuppPfxDamp indicates the number of VPN IPv4 prefixes from this peer, which have been suppressed by damping.
vpnReceivedPrefixes	long	tBgpPeerNgOperVpnRecvPrefixes	tBgpPeerNgOperVpnRecvPrefixes indicates the number of received VPN IPv4 prefixes.
vpnSentPrefixes	long	tBgpPeerNgOperVpnSentPrefixes	tBgpPeerNgOperVpnSentPrefixes indicates the number of transmitted VPN IPv4 prefixes.

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Table F-4 equipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AllocatedMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryPoolAllocated Monitored class: equipment.SystemStatsHolder			
allocatedMemory	long	sgiMemoryPoolAllocated	The value of sgiMemoryPoolAllocated indicates the total memory currently allocated in memory-pools on the system. This memory may or may not be currently in use, but is pre-allocated should the software need to use it.
AvailableMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryAvailable Monitored class: equipment.SystemStatsHolder			
availableMemory	long	sgiMemoryAvailable	The value of sgiMemoryAvailable indicates the amount of free memory in the overall system that is not allocated to memory pools, but is available in case a memory pool needs to grow.
CiscoHDLCStats MIB table name: TIMETRA-PORT-MIB.tmnxCiscoHDLCStatsTable Monitored classes: • tdmequipment.DS3E3Channel • tdmequipment.DS0ChannelGroup			
discardStatInPkts	long	tmnxCiscoHDLCDiscardStatInPkts	tmnxCiscoHDLCDiscardStatInPkts indicates the number of inbound Cisco HDLC packets discarded.
discardStatOutPkts	long	tmnxCiscoHDLCDiscardStatOutPkts	tmnxCiscoHDLCDiscardStatOutPkts indicates the number of outbound Cisco HDLC packets discarded.
statInOctets	long	tmnxCiscoHDLCStatInOctets	tmnxCiscoHDLCStatInOctets indicates the number of inbound Cisco HDLC octets.

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5620 SAM counter name	Type	MIB counter name	Description
statInPkts	long	tmnxCiscoHDLCStatInPkts	tmnxCiscoHDLCStatInPkts indicates the number of inbound Cisco HDLC packets.
statOutOctets	long	tmnxCiscoHDLCStatOutOctets	tmnxCiscoHDLCStatOutOctets indicates the number of outbound Cisco HDLC octets.
statOutPkts	long	tmnxCiscoHDLCStatOutPkts	tmnxCiscoHDLCStatOutPkts indicates the number of outbound Cisco HDLC packets.
InterfaceAdditionalStats MIB table name: IF-MIB.ifXTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
receivedBroadcastPackets	UINT128	ifHCInBroadcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of ifInBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedMulticastPackets	UINT128	ifHCInMulticastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifInMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedTotalOctets	UINT128	ifHCInOctets	The total number of octets received on the interface, including framing characters. This object is a 64-bit version of ifInOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	UINT128	ifHCInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of ifInUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

5620 SAM counter name	Type	MIB counter name	Description
transmittedBroadcastPackets	UINT128	ifHCOutBroadcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedMulticastPackets	UINT128	ifHCOutMulticastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifOutMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedTotalOctets	UINT128	ifHCOutOctets	The total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of ifOutOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	UINT128	ifHCOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
InterfaceStats MIB table name: IF-MIB.ifTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			

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5620 SAM counter name	Type	MIB counter name	Description
outboundBadPackets	long	ifOutErrors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
outboundPacketsDiscarded	long	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedBadPackets	long	ifInErrors	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character- oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedOctets	long	ifInOctets	The total number of octets received on the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedPacketsDiscarded	long	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedUnicastPackets	long	ifInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnknownProtocolPackets	long	ifInUnknownProtos	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedOctets	long	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	long	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
MediaIndependentStats MIB table name: HC-RMON-MIB.mediaIndependentTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dropEvents	long	mediaIndependentDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.

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5620 SAM counter name	Type	MIB counter name	Description
droppedFrames	long	mediaIndependentDroppedFrames	The total number of frames which were received by the probe and therefore not accounted for in the mediaIndependentDropEvents, but for which the probe chose not to count for this entry for whatever reason. Most often, this event occurs when the probe is out of some resources and decides to shed load from this collection. This count does not include packets that were not counted because they had MAC-layer errors. Note that, unlike the dropEvents counter, this number is the exact number of frames dropped.
duplex	int	mediaIndependentDuplexMode	The current mode of this link. Note that if the link has full-duplex capabilities but is operating in half-duplex mode, this value will be halfduplex(1).
duplexChanges	long	mediaIndependentDuplexChanges	The number of times this link has changed from full-duplex mode to half-duplex mode or from half-duplex mode to full-duplex mode.
inputSpeed	long	mediaIndependentInputSpeed	The nominal maximum speed in kilobits per second of this half-duplex link or on the inbound connection of this full-duplex link. If the speed is unknown or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
outputSpeed	long	mediaIndependentOutputSpeed	The nominal maximum speed in kilobits per second of this full-duplex link in the direction of the network. If the speed is unknown, the link is half-duplex, or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
receivedBadPackets	long	mediaIndependentInErrors	The total number of bad packets received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedNonUnicastPackets	UINT128	mediaIndependentInNUCastHighCapacityPkts	The total number of non-unicast packets (including bad packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedOctets	UINT128	mediaIndependentInHighCapacityOctets	The total number of octets of data (including those in bad packets) received (excluding framing bits but including FCS octets) on a half-duplex link or on the inbound connection of a full-duplex link.
receivedPackets	UINT128	mediaIndependentInHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
transmittedBadPackets	long	mediaIndependentOutErrors	The total number of bad packets received on a full-duplex link in the direction of the network.
transmittedNonUnicastPackets	UINT128	mediaIndependentOutNUCastHighCapacityPkts	The total number of packets (including bad packets) received on a full-duplex link in the direction of the network.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedOctets	UINT128	mediaIndependentOutHighCapacityOctets	The total number of octets of data (including those in bad packets) received on a full-duplex link in the direction of the network (excluding framing bits but including FCS octets).
transmittedPackets	UINT128	mediaIndependentOutHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a full-duplex link in the direction of the network.
SystemCpuStats MIB table name: TIMETRA-SYSTEM-MIB.sgiCpuUsage Monitored class: equipment.SystemStatsHolder			
systemCpuUsage	long	sgiCpuUsage	The value of sgiCpuUsage indicates the current CPU utilization for the system.
SystemMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryUsed Monitored class: equipment.SystemStatsHolder			
systemMemoryUsage	long	sgiMemoryUsed	The value of sgiMemoryUsed indicates the total pre-allocated pool memory currently in use on the system.

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Table F-5 ethernetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AdditionalEthernetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortEtherTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
highCapacityPackets1519toMaxFrameSize	UINT128	tmnxPortEtherHCPkts1519toMax	The total number of packets (including bad packets) received that were between 1519 octets in length and the maximum frame size, usually 12287 octets inclusive (excluding framing bits but including FCS octets). The lower 32-bits of this 64-bit counter will equal the value of tmnxPortEtherHCPkts1519toMax. The high 32-bits of this counter will equal the value of tmnxPortEtherHCOverPkts1519toMax.
packets1519toMaxFrameSize	long	tmnxPortEtherPkts1519toMax	The total number of packets received that were longer than 1518 octets but less than the maximum frame size for the particular medium, usually 12287 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
Dot3Stats MIB table name: EtherLike-MIB.dot3StatsTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
alignmentErrors	long	dot3StatsAlignmentErrors	A count of frames received on a particular interface that are not an integral number of octets in length and do not pass the FCS check. The count represented by an instance of this object is incremented when the alignmentError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. This counter does not increment for group encoding schemes greater than 4 bits per group. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsAlignmentErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.7, aAlignmentErrors.
carrierSenseErrors	long	dot3StatsCarrierSenseErrors	The number of times that the carrier sense condition was lost or never asserted when attempting to transmit a frame on a particular interface. The count represented by an instance of this object is incremented at most once per transmission attempt, even if the carrier sense condition fluctuates during a transmission attempt. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.13, aCarrierSenseErrors.

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5620 SAM counter name	Type	MIB counter name	Description
deferredTransmissions	long	dot3StatsDeferredTransmissions	A count of frames for which the first transmission attempt on a particular interface is delayed because the medium is busy. The count represented by an instance of this object does not include frames involved in collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.9, aFramesWithDeferredXmissions.
duplex	int	dot3StatsDuplexStatus	The current mode of operation of the MAC entity. 'unknown' indicates that the current duplex mode could not be determined. Management control of the duplex mode is accomplished through the MAU MIB. When an interface does not support autonegotiation, or when autonegotiation is not enabled, the duplex mode is controlled using ifMauDefaultType. When autonegotiation is supported and enabled, duplex mode is controlled using ifMauAutoNegAdvertisedBits. In either case, the currently operating duplex mode is reflected both in this object and in ifMauType. Note that this object provides redundant information with ifMauType. Normally, redundant objects are discouraged. However, in this instance, it allows a management application to determine the duplex status of an interface without having to know every possible value of ifMauType. This was felt to be sufficiently valuable to justify the redundancy. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.32, aDuplexStatus.
excessiveCollisions	long	dot3StatsExcessiveCollisions	A count of frames for which transmission on a particular interface fails due to excessive collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.11, aFramesAbortedDueToXSColls.

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5620 SAM counter name	Type	MIB counter name	Description
fcsErrors	long	dot3StatsFCSErrors	A count of frames received on a particular interface that are an integral number of octets in length but do not pass the FCS check. This count does not include frames received with frame-too-long or frame-too-short error. The count represented by an instance of this object is incremented when the frameCheckError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. Note: Coding errors detected by the physical layer for speeds above 10 Mb/s will cause the frame to fail the FCS check. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFCSErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.6, aFrameCheckSequenceErrors.
frameTooLongs	long	dot3StatsFrameTooLongs	A count of frames received on a particular interface that exceed the maximum permitted frame size. The count represented by an instance of this object is incremented when the frameTooLong status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. For interfaces operating at 10 Gb/s, this counter can roll over in less than 80 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFrameTooLongs object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.25, aFrameTooLongErrors.

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5620 SAM counter name	Type	MIB counter name	Description
internalMacReceiveErrors	long	dot3StatsInternalMacReceiveErrors	A count of frames for which reception on a particular interface fails due to an internal MAC sublayer receive error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsFrameTooLongs object, the dot3StatsAlignmentErrors object, or the dot3StatsFCSErrors object. The precise meaning of the count represented by an instance of this object is implementation-specific. In particular, an instance of this object may represent a count of receive errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacReceiveErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.15, aFramesLostDueToIntMACRcvError.
internalMacTransmitErrors	long	dot3StatsInternalMacTransmitErrors	A count of frames for which transmission on a particular interface fails due to an internal MAC sublayer transmit error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsLateCollisions object, the dot3StatsExcessiveCollisions object, or the dot3StatsCarrierSenseErrors object. The precise meaning of the count represented by an instance of this object is implementation- specific. In particular, an instance of this object may represent a count of transmission errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacTransmitErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.12, aFramesLostDueToIntMACXmitError.

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5620 SAM counter name	Type	MIB counter name	Description
lateCollisions	long	dot3StatsLateCollisions	The number of times that a collision is detected on a particular interface later than one slotTime into the transmission of a packet. A (late) collision included in a count represented by an instance of this object is also considered as a (generic) collision for purposes of other collision-related statistics. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.10, aLateCollisions.
multipleCollisionFrames	long	dot3StatsMultipleCollisionFrames	A count of frames that are involved in more than one collision and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsSingleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.4, aMultipleCollisionFrames.
singleCollisionFrames	long	dot3StatsSingleCollisionFrames	A count of frames that are involved in a single collision, and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsMultipleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.3, aSingleCollisionFrames.

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5620 SAM counter name	Type	MIB counter name	Description
sqeTestErrors	long	dot3StatsSQETestErrors	A count of times that the SQE TEST ERROR is received on a particular interface. The SQE TEST ERROR is set in accordance with the rules for verification of the SQE detection mechanism in the PLS Carrier Sense Function as described in IEEE Std. 802.3, 2000 Edition, section 7.2.4.6. This counter does not increment on interfaces operating at speeds greater than 10 Mb/s, or on interfaces operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 7.2.4.6, also 30.3.2.1.4, aSQETestErrors.

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5620 SAM counter name	Type	MIB counter name	Description
symbolErrors	long	dot3StatsSymbolErrors	For an interface operating at 100 Mb/s, the number of times there was an invalid data symbol when a valid carrier was present. For an interface operating in half-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than slotTime, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' or 'carrier extend error' on the GMII. For an interface operating in full-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' on the GMII. For an interface operating at 10 Gb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Receive Error' on the XGMII. The count represented by an instance of this object is incremented at most once per carrier event, even if multiple symbol errors occur during the carrier event. This count does not increment if a collision is present. This counter does not increment when the interface is operating at 10 Mb/s. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsSymbolErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.2.1.5, aSymbolErrorDuringCarrier.
EthernetHighCapacityStats MIB table name: HC-RMON-MIB.etherStatsHighCapacityTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
packets1024to1518Octets	UINT128	etherStatsHighCapacityPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
packets128to255Octets	UINT128	etherStatsHighCapacityPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	UINT128	etherStatsHighCapacityPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	UINT128	etherStatsHighCapacityPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	UINT128	etherStatsHighCapacityPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	UINT128	etherStatsHighCapacityPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	UINT128	etherStatsHighCapacityOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). If the network is half-duplex Fast Ethernet, this object can be used as a reasonable estimate of utilization. If greater precision is desired, the etherStatsHighCapacityPkts and etherStatsHighCapacityOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (.96 + .64) + (Octets * .08) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent. This table is not appropriate for monitoring full-duplex ethernets. If the network is a full-duplex ethernet and the mediaIndependentTable is monitoring that network, the utilization can be calculated as follows: 1) Determine the utilization of the inbound path by using the appropriate equation (for ethernet or fast ethernet) to determine the utilization, substituting mediaIndependentInPkts for etherStatsHighCapacityPkts, and mediaIndependentInOctets for etherStatsHighCapacityOctets. Call the resulting utilization inUtilization. 2) Determine the utilization of the outbound path by using the same equation to determine the utilization, substituting mediaIndependentOutPkts for etherStatsHighCapacityPkts, and mediaIndependentOutOctets for etherStatsHighCapacityOctets. Call the resulting utilization outUtilization. 3) The utilization is the maximum of inUtilization and outUtilization. This metric shows the amount of percentage of bandwidth that is left before congestion will be experienced on the link.
totalPackets	UINT128	etherStatsHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
EthernetStats MIB table name: RMON-MIB.etherStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
broadcastPackets	long	etherStatsBroadcastPkts	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets.

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5620 SAM counter name	Type	MIB counter name	Description
collisions	long	etherStatsCollisions	The best estimate of the total number of collisions on this Ethernet segment. The value returned will depend on the location of the RMON probe. Section 8.2.1.3 (10BASE-5) and section 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision, in the receive mode, if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coax segments to which the repeater is connected.
crcAlignErrors	long	etherStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
dropEvents	long	etherStatsDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
fragments	long	etherStatsFragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that it is entirely normal for etherStatsFragments to increment. This is because it counts both runts (which are normal occurrences due to collisions) and noise hits.

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5620 SAM counter name	Type	MIB counter name	Description
jabbers	long	etherStatsJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different than the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition where any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
multicastPackets	long	etherStatsMulticastPkts	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address.
oversizePackets	long	etherStatsOversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
packets1024to1518Octets	long	etherStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).
packets128to255Octets	long	etherStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	long	etherStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	long	etherStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	long	etherStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	long	etherStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	long	etherStatsOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). This object can be used as a reasonable estimate of 10-Megabit ethernet utilization. If greater precision is desired, the etherStatsPkts and etherStatsOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (9.6 + 6.4) + (Octets * .8) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent.
totalPackets	long	etherStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
undersizePackets	long	etherStatsUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.
QosDroppedOctetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortIngrMdaQosStatTable Monitored class: equipment.PhysicalPort			
qosClassifier0DroppedOctets	UINT128	tmnxPortIngrMdaQos00StatDropOcts	tmnxPortIngrMdaQos00StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier10DroppedOctets	UINT128	tmnxPortIngrMdaQos10StatDropOcts	tmnxPortIngrMdaQos10StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier11DroppedOctets	UINT128	tmnxPortIngrMdaQos11StatDropOcts	tmnxPortIngrMdaQos11StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier12DroppedOctets	UINT128	tmnxPortIngrMdaQos12StatDropOcts	tmnxPortIngrMdaQos12StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier13DroppedOctets	UINT128	tmnxPortIngrMdaQos13StatDropOcts	tmnxPortIngrMdaQos13StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier14DroppedOctets	UINT128	tmnxPortIngrMdaQos14StatDropOcts	tmnxPortIngrMdaQos14StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier15DroppedOctets	UINT128	tmnxPortIngrMdaQos15StatDropOcts	tmnxPortIngrMdaQos15StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier1DroppedOctets	UINT128	tmnxPortIngrMdaQos01StatDropOcts	tmnxPortIngrMdaQos01StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier2DroppedOctets	UINT128	tmnxPortIngrMdaQos02StatDropOcts	tmnxPortIngrMdaQos02StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier3DroppedOctets	UINT128	tmnxPortIngrMdaQos03StatDropOcts	tmnxPortIngrMdaQos03StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier4DroppedOctets	UINT128	tmnxPortIngrMdaQos04StatDropOcts	tmnxPortIngrMdaQos04StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier5DroppedOctets	UINT128	tmnxPortIngrMdaQos05StatDropOcts	tmnxPortIngrMdaQos05StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier6DroppedOctets	UINT128	tmnxPortIngrMdaQos06StatDropOcts	tmnxPortIngrMdaQos06StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier7DroppedOctets	UINT128	tmnxPortIngrMdaQos07StatDropOcts	tmnxPortIngrMdaQos07StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier8DroppedOctets	UINT128	tmnxPortIngrMdaQos08StatDropOcts	tmnxPortIngrMdaQos08StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier9DroppedOctets	UINT128	tmnxPortIngrMdaQos09StatDropOcts	tmnxPortIngrMdaQos09StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
QosDroppedPacketStats MIB table name: TIMETRA-PORT-MIB.tmnxPortIngrMdaQosStatTable Monitored class: equipment.PhysicalPort			
qosClassifier0DroppedPackets	UINT128	tmnxPortIngrMdaQos00StatDropPkts	tmnxPortIngrMdaQos00StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier10DroppedPackets	UINT128	tmnxPortIngrMdaQos10StatDropPkts	tmnxPortIngrMdaQos10StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier11DroppedPackets	UINT128	tmnxPortIngrMdaQos11StatDropPkts	tmnxPortIngrMdaQos11StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier12DroppedPackets	UINT128	tmnxPortIngrMdaQos12StatDropPkts	tmnxPortIngrMdaQos12StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier13DroppedPackets	UINT128	tmnxPortIngrMdaQos13StatDropPkts	tmnxPortIngrMdaQos13StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier14DroppedPackets	UINT128	tmnxPortIngrMdaQos14StatDropPkts	tmnxPortIngrMdaQos14StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier15DroppedPackets	UINT128	tmnxPortIngrMdaQos15StatDropPkts	tmnxPortIngrMdaQos15StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier1DroppedPackets	UINT128	tmnxPortIngrMdaQos01StatDropPkts	tmnxPortIngrMdaQos01StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier2DroppedPackets	UINT128	tmnxPortIngrMdaQos02StatDropPkts	tmnxPortIngrMdaQos02StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier3DroppedPackets	UINT128	tmnxPortIngrMdaQos03StatDropPkts	tmnxPortIngrMdaQos03StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier4DroppedPackets	UINT128	tmnxPortIngrMdaQos04StatDropPkts	tmnxPortIngrMdaQos04StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier5DroppedPackets	UINT128	tmnxPortIngrMdaQos05StatDropPkts	tmnxPortIngrMdaQos05StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier6DroppedPackets	UINT128	tmnxPortIngrMdaQos06StatDropPkts	tmnxPortIngrMdaQos06StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier7DroppedPackets	UINT128	tmnxPortIngrMdaQos07StatDropPkts	tmnxPortIngrMdaQos07StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier8DroppedPackets	UINT128	tmnxPortIngrMdaQos08StatDropPkts	tmnxPortIngrMdaQos08StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier9DroppedPackets	UINT128	tmnxPortIngrMdaQos09StatDropPkts	tmnxPortIngrMdaQos09StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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Table F-6 isis statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceLevelOneReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).

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5620 SAM counter name	Type	MIB counter name	Description
InterfaceLevelOneSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
LinkStatePduSiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			

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5620 SAM counter name	Type	MIB counter name	Description
csnpDropped	long	vRtrIsisCSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisCSNPDrop.
csnpReceived	long	vRtrIsisCSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisCSNPRecd.
csnpRetransmitted	long	vRtrIsisCSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisCSNPRetrans.
csnpSent	long	vRtrIsisCSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisCSNPSent.
helloDropped	long	vRtrIsisIIHDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisIIHDrop.
helloReceived	long	vRtrIsisIIHRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisIIHRecd.
helloRetransmitted	long	vRtrIsisIIHRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisIIHRetrans.
helloSent	long	vRtrIsisIIHSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisIIHSent.
lspDropped	long	vRtrIsisLSPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisLSPDrop.
lspReceived	long	vRtrIsisLSPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisLSPRecd.
lspRetransmitted	long	vRtrIsisLSPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisLSPRetrans.
lspSent	long	vRtrIsisLSPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisLSPSent.
psnpDropped	long	vRtrIsisPSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisPSNPDrop.
psnpReceived	long	vRtrIsisPSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisPSNPRecd.
psnpRetransmitted	long	vRtrIsisPSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisPSNPRetrans.
psnpSent	long	vRtrIsisPSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisPSNPSent.

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5620 SAM counter name	Type	MIB counter name	Description
unknownDropped	long	vRtrIsisUnknownDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisUnknownDrop.
unknownReceived	long	vRtrIsisUnknownRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisUnknownRecd.
unknownRetransmitted	long	vRtrIsisUnknownRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisUnknownRetrans.
unknownSent	long	vRtrIsisUnknownSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisUnknownSent.
SiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			
cspfDroppedRequests	long	vRtrIsisCSPFDroppedRequests	vRtrIsisCSPFDroppedRequests maintains the number of dropped CSPF requests by the protocol.
cspfPathsFound	long	vRtrIsisCSPFPathsFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which paths satisfying the constraints were found.
cspfPathsNotFound	long	vRtrIsisCSPFPathsNotFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which no paths satisfying the constraints were found.
cspfRequests	long	vRtrIsisCSPFRequests	vRtrIsisCSPFRequests maintains the number of CSPF requests made to the protocol.
initiatedPurges	long	vRtrIsisInitiatedPurges	The value of vRtrIsisInitiatedPurges counts the number of times purges have been initiated.
lspRegenerations	long	vRtrIsisLSPRegenerations	The value of vRtrIsisLSPRegenerations maintains the count of LSP regenerations.
spfRuns	long	vRtrIsisSpfRuns	The value of vRtrIsisSpfRuns indicates the number of times shortest path first calculations have been made.

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Table F-7 ospf statistics

5620 SAM counter name	Type	MIB counter name	Description
AreaBasicStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfAreaTable Monitored class: ospf.AreaSite			

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5620 SAM counter name	Type	MIB counter name	Description
nssaTranslatorEvents	long	tmnxOspfAreaNssaTranslatorEvents	The value of tmnxOspfAreaNssaTranslatorEvents indicates the number of Translator State changes that have occurred since the last boot-up.
totalLSACount	long	tmnxOspfAreaScopeLsaCount	The value of tmnxOspfAreaScopeLsaCount indicates the total number of Area-Scope link state advertisements in this area's link-state database.
totalSpfRuns	long	tmnxOspfAreaSpfRuns	The value of tmnxOspfAreaSpfRuns indicates the number of times that the intra-area route table has been calculated using this area's link-state database. This is typically done using Dijkstra's algorithm.
totalUnknownLSACount	long	tmnxOspfAreaScopeUnkLsaCount	The value of tmnxOspfAreaScopeUnkLsaCount indicates the total number of unknown Area-Scope link-state advertisements in this area's link-state database.
InterfaceGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
events	long	tmnxOspfIfEvents	The value of tmnxOspfIfEvents indicates the number of times this OSPF interface has changed its state, or an error has occurred.
InterfaceReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF Database Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
lsasWithBadChecksums	long	tmnxOspfIfRxBadChecksums	The value of tmnxOspfIfRxBadChecksums indicates the count of LSAs received with bad checksums.
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
authorizationFailures	long	tmnxOspfIfAuthFailures	The value of tmnxOspfIfAuthFailures indicates the total number of OSPF packets received with an invalid authorization key since tmnxOspfAdminState was last set to 'enabled'.
badAreas	long	tmnxOspfIfBadAreas	The value of tmnxOspfIfBadAreas indicates the total number of OSPF packets received with an area mismatch since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badAuthorizationTypes	long	tmnxOspfIfBadAuthTypes	The value of tmnxOspfIfBadAuthTypes indicates the total number of OSPF packets received with an invalid authorization type since tmnxOspfAdminState was last set to 'enabled'.
badDeadIntervals	long	tmnxOspfIfBadDeadIntervals	The value of tmnxOspfIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badDestinationAddresses	long	tmnxOspfIfBadDstAddrs	The value of tmnxOspfIfBadDstAddrs indicates the total number of OSPF packets received with the incorrect IP destination address since tmnxOspfAdminState was last set to 'enabled'.
badHelloIntervals	long	tmnxOspfIfBadHelloIntervals	The value of tmnxOspfIfBadHelloIntervals indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badLengths	long	tmnxOspfIfBadLengths	The value of tmnxOspfIfBadLengths indicates the total number of OSPF packets received on this interface with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.
badNeighbors	long	tmnxOspfIfBadNeighbors	The value of tmnxOspfIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the information this router has for the neighbor since tmnxOspfAdminState was last set to 'enabled'.
badNetworks	long	tmnxOspfIfBadNetworks	The value of tmnxOspfIfBadNetworks indicates the total number of OSPF packets received with invalid network or mask since tmnxOspfAdminState was last set to 'enabled'.
badOptions	long	tmnxOspfIfBadOptions	The value of tmnxOspfIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this interface or area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfIfBadPacketTypes	The value of tmnxOspfIfBadPacketTypes indicates the total number of OSPF packets received with an invalid OSPF packet type since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badVersions	long	tmnxOspfIfBadVersions	The value of tmnxOspfIfBadVersions indicates the total number of OSPF packets received with bad OSPF version numbers since tmnxOspfAdminState was last set to 'enabled'.
badVirtualLinks	long	tmnxOspfIfBadVirtualLinks	The value of tmnxOspfIfBadVirtualLinks indicates the total number of OSPF packets received on this interface that are destined to a virtual link that does not exist since tmnxOspfAdminState was last set to 'enabled'.
discardPackets	long	tmnxOspfIfDiscardPackets	The value of tmnxOspfIfDiscardPackets indicates the total number of OSPF packets discarded on this interface since tmnxOspfAdminState was last set to 'enabled'.
retransmitOuts	long	tmnxOspfIfRetransmitOuts	The value of tmnxOspfIfRetransmitOuts indicates the total number of OSPF Retransmits sent on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF Database Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
NeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			
events	long	tmnxOspfNbrEvents	The value of tmnxOspfNbrEvents indicates the number of times this neighbor relationship has changed state, or an error has occurred.
retransmissionQueueLength	long	tmnxOspfNbrLsRetransQLen	The value of tmnxOspfNbrLsRetransQLen indicates the current length of the retransmission queue.
NeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			
badMtus	long	tmnxOspfNbrBadMTUs	The value of tmnxOspfNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badNeighborStates	long	tmnxOspfNbrBadNbrStates	The value of tmnxOspfNbrBadNbrStates indicates the total number of OSPF packets received when the neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfNbrBadPackets	The value of tmnxOspfNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfNbrBadSeqNums	The value of tmnxOspfNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
duplicates	long	tmnxOspfNbrDuplicates	The value of tmnxOspfNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfNbrLsaInstallFailed	The value of tmnxOspfNbrLsaInstallFailed indicates the total number of times an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfNbrLsaNotInLsdbs	The value of tmnxOspfNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.
numberOfRestarts	long	tmnxOspfNbrNumRestarts	The value of tmnxOspfNbrNumRestarts indicates the number of times the neighbor has attempted restart.
optionMismatches	long	tmnxOspfNbrOptionMismatches	The value of tmnxOspfNbrOptionMismatches indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
SiteStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfStatisticsTable Monitored class: ospf.Site			
addRouteFailed	long	tmnxOspfRoutesAddsFailed	The value of tmnxOspfRoutesAddsFailed indicates the number of times an attempt to add a route to the Route Table Manager (RTM) failed for this OSPF instance.
cspfDroppedRequests	long	tmnxOspfCSPFDroppedRequests	The value of tmnxOspfCSPFDroppedRequests indicates the number of dropped CSPF requests made by the OSPF protocol.

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5620 SAM counter name	Type	MIB counter name	Description
cspfPathsFound	long	tmnxOspfCSPFPathsFound	The value of tmnxOspfCSPFPathsFound indicates the number of of paths found for the requests made to OSPF protocol.
cspfPathsNotFound	long	tmnxOspfCSPFPathsNotFound	The value of tmnxOspfCSPFPathsNotFound indicates the number of of paths not found for the requests made to OSPF protocol.
cspfRequests	long	tmnxOspfCSPFRequests	The value of tmnxOspfCSPFRequests indicates the number of CSPF requests made to the OSPF protocol.
deleteRouteFailed	long	tmnxOspfRoutesDelsFailed	The value of tmnxOspfRoutesDelsFailed indicates the number of times an attempt to delete a route from the Route Table Manager (RTM) failed for this instance of OSPF.
inOverflowCount	long	tmnxOspfNumTimesInOverflow	The value of tmnxOspfNumTimesInOverflow indicates the count of the number of times the system was in the overflow state.
inOverloadCount	long	tmnxOspfNumTimesInOverload	The value of tmnxOspfNumTimesInOverload indicates the count of the number of times the system was overloaded.
modifyRouteFailed	long	tmnxOspfRoutesModsFailed	The value of tmnxOspfRoutesModsFailed indicates the number of times an attempt to modify a route in the Route Table Manager (RTM) failed for this instance of OSPF.
newLsasOriginated	long	tmnxOspfOriginateNewLsas	The value of tmnxOspfOriginateNewLsas indicates the number of new link-state advertisements that have been originated. This number is incremented each time the router originates a new LSA.
newLsasReceived	long	tmnxOspfRxNewLsas	The value of tmnxOspfRxNewLsas indicates the number of link-state advertisements received determined to be new instantiations. This number does not include newer instantiations of self-originated link-state advertisements.
spfAttemptsFailed	long	tmnxOspfSpfAttemptsFailed	The value of tmnxOspfSpfAttemptsFailed indicates the number of times an attempt to run SPF has failed because SPF runs have been stopped as a result of insufficient memory resources.

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Table F-8 rtr statistics

5620 SAM counter name	Type	MIB counter name	Description
RouteStats MIB table name: TIMETRA-VRTR-MIB.vRtrStatTable Monitored classes: • rtr.VirtualRouter • vprn.Site			
activeARPEntries	long	vRtrStatActiveARPEntries	vRtrStatActiveARPEntries indicates the number of active ARP entries for the specified virtual router in the system.
aggregateActiveRoutes	long	vRtrAggregateActiveRoutes	vRtrAggregateActiveRoutes indicates the current number of active aggregate routes for this instance of the route table.
aggregateRoutes	long	vRtrAggregateRoutes	vRtrAggregateRoutes indicates the current number of aggregate routes for this instance of the route table.
bgpActiveRoutes	long	vRtrBGPActiveRoutes	vRtrBGPActiveRoutes indicates the current number of active bgp routes for this instance of the route table.
bgpRoutes	long	vRtrBGPRoutes	vRtrBGPRoutes indicates the current number of bgp routes for this instance of the route table.
bgpVpnActiveRoutes	long	vRtrStatBGPVpnActiveRoutes	vRtrStatBGPVpnActiveRoutes indicates the current number of active VPN-IPV4 routes learned by MP-BGP for this virtual router.
bgpVpnRoutes	long	vRtrStatBGPVpnRoutes	vRtrStatBGPVpnRoutes indicates the current number of VPN-IPV4 routes learned by MP-BGP for this virtual router.
directActiveRoutes	long	vRtrDirectActiveRoutes	vRtrDirectActiveRoutes indicates the current number of active direct routes for this instance of the route table.
directRoutes	long	vRtrDirectRoutes	vRtrDirectRoutes indicates the current number of direct routes for this instance of the route table.
illegalLabelsReceived	long	vRtrStatIllegalLabels	vRtrStatIllegalLabels indicates the number of illegally received labels on this virtual router.
isisActiveRoutes	long	vRtrISISActiveRoutes	vRtrISISActiveRoutes indicates the current number of active isis routes for this instance of the route table.
isisRoutes	long	vRtrISISRoutes	vRtrISISRoutes indicates the current number of isis routes for this instance of the route table.
ldpActiveTunnels	long	vRtrStatActiveLdpTunnels	vRtrStatActiveLdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'ldp'.
ldpTunnels	long	vRtrStatTotalLdpTunnels	vRtrStatTotalLdpTunnels indicates the current number of both active and inactive LDP tunnels.

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5620 SAM counter name	Type	MIB counter name	Description
multicastRoutes	long	vRtrMulticastRoutes	vRtrMulticastRoutes indicates the current number of rows in the vRtrPimGrpSrcTable.
ospfActiveRoutes	long	vRtrOSPFActiveRoutes	vRtrOSPFActiveRoutes indicates the current number of active ospf routes for this instance of the route table.
ospfRoutes	long	vRtrOSPFRoutes	vRtrOSPFRoutes indicates the current number of ospf routes for this instance of the route table.
ripActiveRoutes	long	vRtrRIPActiveRoutes	vRtrRIPActiveRoutes indicates the current number of active rip routes for this instance of the route table.
ripRoutes	long	vRtrRIPRoutes	vRtrRIPRoutes indicates the current number of rip routes for this instance of the route table.
routerInterfacesActive	long	vRtrStatActiveIfs	vRtrStatActiveIfs indicates the current number of router interfaces with vRtrIfAdminState equal 'inService' on this virtual router.
routerInterfacesConfigured	long	vRtrStatConfiguredIfs	vRtrStatConfiguredIfs indicates the current number of router interfaces configured on this virtual router.
routesInVrf	long	vRtrStatCurrNumRoutes	vRtrStatCurrNumRoutes indicates the current number of routes in the VRF for this virtual router.
sdpActiveTunnels	long	vRtrStatActiveSdpTunnels	vRtrStatActiveSdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'sdp'.
sdpTunnels	long	vRtrStatTotalSdpTunnels	vRtrStatTotalSdpTunnels indicates the current number of both active and inactive SDP tunnels.
staticActiveRoutes	long	vRtrStaticActiveRoutes	vRtrStaticActiveRoutes indicates the current number of active static routes for this instance of the route table.
staticRoutes	long	vRtrStaticRoutes	vRtrStaticRoutes indicates the current number of static routes for this instance of the route table.
totalARPEntries	long	vRtrStatTotalARPEntries	vRtrStatTotalARPEntries indicates the total number of active and inactive ARP entries for the specified virtual router in the system.
VirtualRouterIcmp6InStats MIB table name: TIMETRA-VRTR-MIB.vRtrIcmp6Table Monitored classes: • rtr.VirtualRouter • vprn.Site			
inDestinationUnreachable	long	vRtrIcmp6InDestUnreachs	The value of vRtrIcmp6InDestUnreachs indicates the number of ICMP Destination Unreachable messages received by this router instance.

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5620 SAM counter name	Type	MIB counter name	Description
inEchoReplies	long	vRtrIcmp6InEchoReplies	The value of vRtrIcmp6InEchoReplies indicates the number of ICMP Echo Reply messages received by this router instance.
inEchoRequests	long	vRtrIcmp6InEchos	The value of vRtrIcmp6InEchos indicates the number of ICMP Echo (request) messages received by this router instance.
inErrors	long	vRtrIcmp6InErrors	The value of vRtrIcmp6InErrors indicates the number of ICMP messages which this router instance received but determined as having ICMP-specific errors (bad ICMP checksums, bad length , etc.).
inNeighborAdvertisements	long	vRtrIcmp6InNbrAdvertisements	The value of vRtrIcmp6InNbrAdvertisements indicates the number of ICMP Neighbor Advertisement messages received by this router instance.
inNeighborSolicits	long	vRtrIcmp6InNbrSolicits	The value of vRtrIcmp6InNbrSolicits indicates the number of ICMP Neighbor Solicit messages received by this router instance.
inPacketTooBig	long	vRtrIcmp6InPktTooBigs	The value of vRtrIcmp6InPktTooBigs indicates the number of ICMP Packet Too Big messages received by this router instance.
inRedirects	long	vRtrIcmp6InRedirects	The value of vRtrIcmp6InRedirects indicates number of ICMP Redirect messages received by this router instance.
inRouterAdvertisements	long	vRtrIcmp6InRtrAdvertisements	The value of vRtrIcmp6InRtrAdvertisements indicates the number of ICMP Router Advertisement messages received by this router instance.
inRouterSolicits	long	vRtrIcmp6InRtrSolicits	The value of vRtrIcmp6InRtrSolicits indicates the number of ICMP Router Solicit messages received by this router instance.
inTimeExceeded	long	vRtrIcmp6InTimeExcds	The value of vRtrIcmp6InTimeExcds indicates the number of ICMP Time Exceeded messages received by this router instance.
inTotalMessages	long	vRtrIcmp6InMsgs	The value of vRtrIcmp6InMsgs indicates the total number of ICMP messages received by this router instance which includes all those counted by vRtrIcmp6InErrors.

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Table F-9 sitesec statistics

5620 SAM counter name	Type	MIB counter name	Description
CpmFilterQueueStats MIB table name: TIMETRA-SECURITY-MIB.tCpmFilterQueueStatsTable Monitored class: sitesec.CpmFilterQueue			
droppedInOctets	UINT128	tCpmFilterQInProfileDropOctets	The value of tCpmFilterQInProfileDropOctets indicates the number of octets complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedInPackets	UINT128	tCpmFilterQInProfileDropPkts	The value of tCpmFilterQInProfileDropPkts indicates the number of packets complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedOutOctets	UINT128	tCpmFilterQOutProfileDropOctets	The value of tCpmFilterQOutProfileDropOctets indicates the number of octets not complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedOutPackets	UINT128	tCpmFilterQOutProfileDropPkts	The value of tCpmFilterQOutProfileDropPkts indicates the number of packets not complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
forwardedInOctets	UINT128	tCpmFilterQInProfileFwdOctets	The value of tCpmFilterQInProfileFwdOctets indicates the number of octets complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedInPackets	UINT128	tCpmFilterQInProfileFwdPkts	The value of tCpmFilterQInProfileFwdPkts indicates the number of packets complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedOutOctets	UINT128	tCpmFilterQOutProfileFwdOctets	The value of tCpmFilterQOutProfileFwdOctets indicates the number of octets not complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedOutPackets	UINT128	tCpmFilterQOutProfileFwdPkts	The value of tCpmFilterQOutProfileFwdPkts indicates the number of packets not complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.

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5620 SAM counter name	Type	MIB counter name	Description
CpmIpFilterStats MIB table name: TIMETRA-SECURITY-MIB.tCpmIpFilterStatsTable Monitored class: sitesec.CpmIpFilterEntry			
droppedPackets	UINT128	tCpmIpFilterStatsDroppedPkts	The value of tCpmIpFilterStatsDroppedPkts indicates the number of packets dropped due to the tCpmIpFilterEntry with the same index.
forwardedPackets	UINT128	tCpmIpFilterStatsForwardedPkts	The value of tCpmIpFilterStatsForwardedPkts indicates the number of packets forwarded due to the tCpmIpFilterEntry with the same index.
MafEntryStats MIB table name: TIMETRA-SECURITY-MIB.tmnxIPMafMatchTable Monitored class: sitesec.MafEntry			
matchCount	UINT128	tmnxIPMafMatchCount	The value of tmnxIPMafMatchCount indicates the number of times a management packet has matched this filter entry.

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G. 7705 SAR Release 2.0 statistics counters

G.1 7705 SAR Release 2.0 statistics counters G-2

G.1 7705 SAR Release 2.0 statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for the 7705 SAR, Release 2.0. Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.



Note — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table G-1 lists each statistics package and the associated statistics-counter table.

Table G-1 Statistics packages and counter tables

Package name	See
aclfilter	Table G-2
atm	Table G-3
bundle	Table G-4
equipment	Table G-5
ethernetequipment	Table G-6
isis	Table G-7
ldp	Table G-8
mpls	Table G-9
ospf	Table G-10
ppp	Table G-11
rsvp	Table G-12
rtr	Table G-13
service	Table G-14
sitesec	Table G-15
sonetequipment	Table G-16
svt	Table G-17
tdmequipment	Table G-18

Table G-2 aclfilter statistics

5620 SAM counter name	Type	MIB counter name	Description
HitCountStats MIB table name: TIMETRA-FILTER-MIB.tIPFilterParamsTable Monitored class: aclfilter.IpFilterEntry			
ingressHitCount	UINT128	tIPFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.

Table G-3 atm statistics

5620 SAM counter name	Type	MIB counter name	Description
AtmOamVplStatistics MIB table name: TIMETRA-ATM-MIB.tAtmOamVplStatisticsTable Monitored class: atm.VPConnection			
tAtmOamVplStatsAISCellsRxd	long	tAtmOamVplStatsAISCellsRxd	The value of tAtmOamVplStatsAISCellsRxd indicates the number of AIS cells received on this VPL for both end to end and segment.
tAtmOamVplStatsAISCellsTxd	long	tAtmOamVplStatsAISCellsTxd	The value of tAtmOamVplStatsAISCellsTxd indicates the number of AIS cells transmitted on this VPL for both end to end and segment.
tAtmOamVplStatsCrc10Errors	long	tAtmOamVplStatsCrc10Errors	The value of tAtmOamVplStatsCrc10Errors indicates the number of OAM cells discarded on this VPL with CRC 10 errors.
tAtmOamVplStatsLoopbackCellsRxd	long	tAtmOamVplStatsLoopbackCellsRxd	The value of tAtmOamVplStatsLoopbackCellsRxd indicates the number of loopback requests and responses received on this VPL for both end to end and segment.
tAtmOamVplStatsLoopbackCellsTxd	long	tAtmOamVplStatsLoopbackCellsTxd	The value of tAtmOamVplStatsLoopbackCellsTxd indicates the number of loopback requests and responses transmitted on this VPL for both end to end and segment.
tAtmOamVplStatsOtherCellsRxd	long	tAtmOamVplStatsOtherCellsRxd	This value of tAtmOamVplStatsOtherCellsRxd indicates the number of OAM cells that are received on this VPL but not identified.
tAtmOamVplStatsRDICellsRxd	long	tAtmOamVplStatsRDICellsRxd	The value of tAtmOamVplStatsRDICellsRxd indicates the number of RDI cells received on this VPL for both end to end and segment.
tAtmOamVplStatsRDICellsTxd	long	tAtmOamVplStatsRDICellsTxd	The value of tAtmOamVplStatsRDICellsTxd indicates the number of RDI cells transmitted on this VPL for both end to end and segment.

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5620 SAM counter name	Type	MIB counter name	Description
AtmVplStatistics MIB table name: TIMETRA-ATM-MIB.tAtmVplStatisticsTable Monitored class: atm.VPConnection			
tAtmVplStatsDrpCellsRxd	long	tAtmVplStatsDrpCellsRxd	The value of tAtmVplStatsDrpCellsRxd indicates the number of all policer cells discards (CLP=0+1) of the VPL. This excludes any buffer management discards (if applicable).
tAtmVplStatsDrpClp0CellsRxd	long	tAtmVplStatsDrpClp0CellsRxd	The value of tAtmVplStatsDrpClp0CellsRxd indicates the number of all policer CLP=0 cells discards of the VPL. This excludes any buffer management discards (if applicable).
tAtmVplStatsDrpClp0CellsTxd	long	tAtmVplStatsDrpClp0CellsTxd	The value of tAtmVplStatsDrpClp0CellsTxd indicates the number of all CLP=0 cells discards of this VPL. This includes both discards due to buffer management and policer.
tAtmVplStatsTagCells	long	tAtmVplStatsTagCells	The value of tAtmVplStatsTagCells indicates the number of tagged CLP=0 cells of the VPL. The egress may or may not discard these cells.
tAtmVplStatsTotalBytesRxd	UINT128	tAtmVplStatsTotalBytesRxd	The value of tAtmVplStatsTotalBytesRxd indicates the number of bytes received by this VPL. This is the number of tAtmVplStatsTotalCellsRxd multiplied by 53.
tAtmVplStatsTotalBytesTxd	UINT128	tAtmVplStatsTotalBytesTxd	The value of tAtmVplStatsTotalBytesTxd indicates the number of bytes transmitted by this VPL. This is the number of tAtmVplStatsTotalCellsTxd multiplied by 53.
tAtmVplStatsTotalCellsRxd	UINT128	tAtmVplStatsTotalCellsRxd	The value of tAtmVplStatsTotalCellsRxd indicates the number of valid ATM cells received by the VPL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVplStatsTotalCellsTxd	UINT128	tAtmVplStatsTotalCellsTxd	The value of tAtmVplStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the VPL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVplStatsTotalClp0CellsRxd	UINT128	tAtmVplStatsTotalClp0CellsRxd	The value of tAtmVplStatsTotalClp0CellsRxd indicates the number of valid ATM CLP=0 cells received by the VPL. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.

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5620 SAM counter name	Type	MIB counter name	Description
tAtmVplStatsTotalClp0CellsTxd	UINT128	tAtmVplStatsTotalClp0CellsTxd	The value of tAtmVplStatsTotalClp0CellsTxd indicates the number of valid ATM CLP=0 cells transmitted by the VPL. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
InterfaceStats MIB table name: TIMETRA-ATM-MIB.tAtmIntfStatsTable Monitored class: atm.Interface			
tAtmInterfaceStatsTotalBytesRxd	UINT128	tAtmIntfStatsTotalBytesRxd	The value of tAtmIntfStatsTotalBytesRxd indicates the number of bytes received on this interface. This is the number of tAtmIntfStatsTotalCellsRxd multiplied by 53.
tAtmInterfaceStatsTotalBytesTxd	UINT128	tAtmIntfStatsTotalBytesTxd	The value of tAtmIntfStatsTotalBytesTxd indicates the number of bytes transmitted on this interface. This is the number of tAtmIntfStatsTotalCellsTxd multiplied by 53.
tAtmInterfaceStatsTotalCellsRxd	UINT128	tAtmIntfStatsTotalCellsRxd	The value of tAtmIntfStatsTotalCellsRxd indicates the number of valid ATM cells received by the ATM interface including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmInterfaceStatsTotalCellsTxd	UINT128	tAtmIntfStatsTotalCellsTxd	The value of tAtmIntfStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the ATM interface including both CLP=0 and CLP=1 cells.
tAtmInterfaceStatsTotalUnknownCellsDropped	long	tAtmIntfStatsTotalUnknCellsDrp	The value of tAtmIntfStatsTotalUnknCellsDrp indicates the number of cells dropped due to an unknown VPI/VCI.
PvcConnectionOamStats MIB table name: TIMETRA-ATM-MIB.tAtmOamVclStatisticsTable Monitored class: atm.PvcConnection			
oamAISCellsRxd	long	tAtmOamVclStatsAISCellsRxd	The value of tAtmOamVclStatsAISCellsRxd indicates the number of AIS cells received on this VC for both end to end and segment.
oamAISCellsTxd	long	tAtmOamVclStatsAISCellsTxd	The value of tAtmOamVclStatsAISCellsTxd indicates the number of AIS cells transmitted on this VC for both end to end and segment.
oamCrc10Errors	long	tAtmOamVclStatsCrc10Err	The value of tAtmOamVclStatsCrc10Err indicates the number of oam cells discarded with CRC 10 Errors.
oamLoopbackCellsRxd	long	tAtmOamVclStatsLoopbackCellsRxd	The value of tAtmOamVclStatsLoopbackCellsRxd indicates the number of loopback requests and responses received on this VC for both end to end and segment.

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5620 SAM counter name	Type	MIB counter name	Description
oamLoopbackCellsTxd	long	tAtmOamVclStatsLoopbackCellsTxd	The value of tAtmOamVclStatsLoopbackCellsTxd indicates the number of loopback requests and responses transmitted on this VC for both end to end and segment.
oamOtherCellsRxd	long	tAtmOamVclStatsOtherCellsRxd	This value of tAtmOamVclStatsOtherCellsRxd indicates the number of oam cells that are received but not identified.
oamRDICellsRxd	long	tAtmOamVclStatsRDICellsRxd	The value of tAtmOamVclStatsRDICellsRxd indicates the number of RDI cells received on this VC for both end to end and segment.
oamRDICellsTxd	long	tAtmOamVclStatsRDICellsTxd	The value of tAtmOamVclStatsRDICellsTxd indicates the number of RDI cells transmitted on this VC for both end to end and segment.
PvcConnectionStats MIB table name: TIMETRA-ATM-MIB.tAtmVclStatisticsTable Monitored class: atm.PvcConnection			
totalBytesRxd	UINT128	tAtmVclStatsTotalBytesRxd	The value of tAtmVclStatsTotalBytesRxd indicates the number of bytes received by this Vcl. This is the number of tAtmVclStatsTotalCellsRxd multiplied by 53.
totalBytesTxd	UINT128	tAtmVclStatsTotalBytesTxd	The value of tAtmVclStatsTotalBytesTxd indicates the number of bytes transmitted by this Vcl. This is the number of tAtmVclStatsTotalCellsTxd multiplied by 53.
totalPacketsRxd	UINT128	tAtmVclStatsTotalCellsRxd	The value of tAtmVclStatsTotalCellsRxd indicates the number of valid ATM cells received by the VCL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
totalPacketsTxd	UINT128	tAtmVclStatsTotalCellsTxd	The value of tAtmVclStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the VCL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
TCStats MIB table name: ATM-MIB.atmInterfaceTCTable Monitored class: atm.Interface			
ocdEvents	long	atmInterfaceOCDEvents	The number of times the Out of Cell Delineation (OCD) events occur. If seven consecutive ATM cells have Header Error Control (HEC) violations, an OCD event occurs. A high number of OCD events may indicate a problem with the TC Sublayer.
TCSubLayerStats MIB table name: TIMETRA-ATM-MIB.tAtmTCSublayerTable Monitored class: atm.Interface			

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5620 SAM counter name	Type	MIB counter name	Description
hecErrors	long	tAtmTCSublayerHecErrors	The value of tAtmTCSublayerHecErrors indicates the number of cells with uncorrectable HEC Errors on this interface.
hecErrorsFixed	long	tAtmTCSublayerHecErrorsFixed	The value of tAtmTCSublayerHecErrorsFixed indicates the number of cells with correctable HEC Errors on this interface.

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Table G-4 bundle statistics

5620 SAM counter name	Type	MIB counter name	Description
BundleStats MIB table name: TIMETRA-PORT-MIB.tmnxBundleTable Monitored class: bundle.Interface			
inputDiscards	long	tmnxBundleInputDiscards	tmnxBundleInputDiscards indicates the number of LCP packets that were discarded. This object is only supported for a tmnxBundleType value of mlppp.
upTime	long	tmnxBundleUpTime	tmnxBundleUpTime indicates the time since the bundle is operationally 'inService'.
MultiClassMlpppStats MIB table name: TIMETRA-PORT-MIB.tmnxMcMlpppStatsTable Monitored class: bundle.MultiClassMlpppSpecifics			
mcMlpppStatsEgressErrPkt	long	tmnxMcMlpppStatsEgressErrPkt	The value of tmnxMcMlpppStatsEgressErrPkt indicates the total number of packets discarded due to segmentation errors on the bundle for the given class on egress.
mcMlpppStatsEgressOct	long	tmnxMcMlpppStatsEgressOct	The value of tmnxMcMlpppStatsEgressOct indicates the total number of octets in all packets received on the bundle for the given class on egress before segmentation.
mcMlpppStatsEgressPkt	long	tmnxMcMlpppStatsEgressPkt	The value of tmnxMcMlpppStatsEgressPkt indicates the total number of packets forwarded on the bundle for the given class on egress towards the line.
mcMlpppStatsIngressErrPkt	long	tmnxMcMlpppStatsIngressErrPkt	The value of tmnxMcMlpppStatsIngressErrPkt indicates the total number of packets discarded due to reassembly errors on the bundle for the given class on ingress.
mcMlpppStatsIngressOct	long	tmnxMcMlpppStatsIngressOct	The value of tmnxMcMlpppStatsIngressOct indicates the total number of octets in all packets received on the bundle for the given class on ingress before reassembly.

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5620 SAM counter name	Type	MIB counter name	Description
mcMlpppStatsIngressPkt	long	tmnxMcMlpppStatsIngressPkt	The value of tmnxMcMlpppStatsIngressPkt indicates the total number of packets forwarded on the bundle for the given class on ingress towards higher layer protocols.

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Table G-5 equipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AllocatedMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryPoolAllocated Monitored class: equipment.SystemStatsHolder			
allocatedMemory	long	sgiMemoryPoolAllocated	The value of sgiMemoryPoolAllocated indicates the total memory currently allocated in memory-pools on the system. This memory may or may not be currently in use, but is pre-allocated should the software need to use it.
AvailableMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryAvailable Monitored class: equipment.SystemStatsHolder			
availableMemory	long	sgiMemoryAvailable	The value of sgiMemoryAvailable indicates the amount of free memory in the overall system that is not allocated to memory pools, but is available in case a memory pool needs to grow.
DetailedPacketDiscardStats MIB table name: ALU-PORT-MIB.aluPortDiscardsStatsTable Monitored classes: • equipment.PhysicalPort • bundle.Interface • tdmequipment.DS0ChannelGroup			
inCsmQFtpPriDiscards	UINT128	aluPortInCsmQFtpPriDiscards	aluPortInCsmQFtpPriDiscards indicates the number of packets discarded in the Ingress CSM Ftp Priority Queue.
inCsmQHiPriDiscards	UINT128	aluPortInCsmQHiPriDiscards	aluPortInCsmQHiPriDiscards indicates the number of packets discarded in the Ingress CSM High Priority Queue.
inCsmQLowPriDiscards	UINT128	aluPortInCsmQLowPriDiscards	aluPortInCsmQLowPriDiscards indicates the number of packets discarded in the Ingress CSM Low Priority Queue.
inHdlcCrcDiscards	UINT128	aluPortInHdlcCrcDiscards	aluPortInHdlcCrcDiscards indicates the number of packets discarded due to the HDLC frame containing a CRC error. This statistic is only applicable to interfaces that have an encapsulation type of PPP-AUTO.

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5620 SAM counter name	Type	MIB counter name	Description
inIPAddrProtoDiscards	UINT128	aluPortInIPAddrProtoDiscards	aluPortIPAddrProtoDiscards indicates the number of packets discarded that contained an invalid IP address or unsupported IP protocol.
inL2AddrProtoDiscards	UINT128	aluPortInL2AddrProtoDiscards	aluPortL2AddrProtoDiscards indicates the number of packets discarded that contained an unsupported type/protocol or unknown address at layer 2.
inMPLSLabelDiscards	UINT128	aluPortInMPLSLabelDiscards	aluPortMPLSLabelDiscards indicates the number of packets discarded that contained unknown mpls outer tunnels, unknown inner label or more than two unsupported labels.
inOtherDiscards	UINT128	aluPortInOtherDiscards	aluPortInOtherDiscards indicates the number of packets discarded at ingress for other reasons during processing.
outCsmQDiscards	UINT128	aluPortOutCsmQDiscards	aluPortOutCsmQDiscards indicates the number of packets discarded in the Egress CSM Queue.
outOtherDiscards	UINT128	aluPortOutOtherDiscards	aluPortOutOtherDiscards indicates the number of packets discarded at egress for other reasons during processing.
outPortMtuDiscards	UINT128	aluPortOutPortMtuDiscards	aluPortOutPortMtuDiscards indicates the number of packets discarded at egress due to the packet exceeding the configured port mtu.
FibNextHopStats MIB table name: TIMETRA-VRTR-MIB.vRtrFibStatNextHopTable Monitored class: equipment.BaseCard			
ipActive	long	vRtrFibStatNextHopIPActive	vRtrFibStatNextHopIPActive indicates current active IP next-hop counts for the FIB on the IOM.
ipAvailable	long	vRtrFibStatNextHopIPAvailable	vRtrFibStatNextHopIPAvailable indicates the available IP next-hop counts for the FIB on the IOM.
tunnelActive	long	vRtrFibStatNextHopTunnelActive	vRtrFibStatNextHopTunnelActive indicates current active Tunnel next-hop counts for the FIB on the IOM.
tunnelAvailable	long	vRtrFibStatNextHopTunnelAvailable	vRtrFibStatNextHopTunnelAvailable indicates the available Tunnel next-hop counts for the FIB on the IOM.
FibStats MIB table name: TIMETRA-VRTR-MIB.vRtrFibStatTable Monitored class: equipment.BaseCard			
aggrRoutes	long	vRtrFibStatAggrRoutes	vRtrFibStatAggrRoutes indicates current aggregate route counts for the virtual router.
directRoutes	long	vRtrFibStatDirectRoutes	vRtrFibStatDirectRoutes indicates current direct route counts for the virtual router.
hostRoutes	long	vRtrFibStatHostRoutes	vRtrFibStatHostRoutes indicates current host route counts for the virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
isisRoutes	long	vRtrFibStatISISRoutes	vRtrFibStatISISRoutes indicates current ISIS route counts for the virtual router.
managedRoutes	long	vRtrFibStatManagedRoutes	vRtrFibStatManagedRoutes indicates current managed route counts for the virtual router.
ospfRoutes	long	vRtrFibStatOSPFRoutes	vRtrFibStatOSPFRoutes indicates current OSPF route counts for the virtual router.
overflows	long	vRtrFibStatOverflows	vRtrFibStatOverflows indicates the number of times the FIB has run out of space.
staticRoutes	long	vRtrFibStatStaticRoutes	vRtrFibStatStaticRoutes indicates current static route counts for the virtual router.
InterfaceAdditionalStats MIB table name: IF-MIB.ifXTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
receivedBroadcastPackets	UINT128	ifHCInBroadcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of ifInBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedMulticastPackets	UINT128	ifHCInMulticastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifInMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedTotalOctets	UINT128	ifHCInOctets	The total number of octets received on the interface, including framing characters. This object is a 64-bit version of ifInOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedUnicastPackets	UINT128	ifHCInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of ifInUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedBroadcastPackets	UINT128	ifHCOutBroadcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedMulticastPackets	UINT128	ifHCOutMulticastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifOutMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedTotalOctets	UINT128	ifHCOutOctets	The total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of ifOutOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	UINT128	ifHCOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: IF-MIB.ifTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
outboundBadPackets	long	ifOutErrors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
outboundPacketsDiscarded	long	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedBadPackets	long	ifInErrors	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character- oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedOctets	long	ifInOctets	The total number of octets received on the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedPacketsDiscarded	long	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	long	ifInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnknownProtocolPackets	long	ifInUnknownProtos	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedOctets	long	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	long	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
MediaIndependentStats MIB table name: HC-RMON-MIB.mediaIndependentTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			

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5620 SAM counter name	Type	MIB counter name	Description
dropEvents	long	mediaIndependentDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
droppedFrames	long	mediaIndependentDroppedFrames	The total number of frames which were received by the probe and therefore not accounted for in the mediaIndependentDropEvents, but for which the probe chose not to count for this entry for whatever reason. Most often, this event occurs when the probe is out of some resources and decides to shed load from this collection. This count does not include packets that were not counted because they had MAC-layer errors. Note that, unlike the dropEvents counter, this number is the exact number of frames dropped.
duplex	int	mediaIndependentDuplexMode	The current mode of this link. Note that if the link has full-duplex capabilities but is operating in half-duplex mode, this value will be halfduplex(1).
duplexChanges	long	mediaIndependentDuplexChanges	The number of times this link has changed from full-duplex mode to half-duplex mode or from half-duplex mode to full-duplex mode.
inputSpeed	long	mediaIndependentInputSpeed	The nominal maximum speed in kilobits per second of this half-duplex link or on the inbound connection of this full-duplex link. If the speed is unknown or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
outputSpeed	long	mediaIndependentOutputSpeed	The nominal maximum speed in kilobits per second of this full-duplex link in the direction of the network. If the speed is unknown, the link is half-duplex, or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
receivedBadPackets	long	mediaIndependentInErrors	The total number of bad packets received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedNonUnicastPackets	UINT128	mediaIndependentInNUCastHighCapacityPkts	The total number of non-unicast packets (including bad packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedOctets	UINT128	mediaIndependentInHighCapacityOctets	The total number of octets of data (including those in bad packets) received (excluding framing bits but including FCS octets) on a half-duplex link or on the inbound connection of a full-duplex link.
receivedPackets	UINT128	mediaIndependentInHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a half-duplex link or on the inbound connection of a full-duplex link.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedBadPackets	long	mediaIndependentOutErrors	The total number of bad packets received on a full-duplex link in the direction of the network.
transmittedNonUnicastPackets	UINT128	mediaIndependentOutNUCastHighCapacityPkts	The total number of packets (including bad packets) received on a full-duplex link in the direction of the network.
transmittedOctets	UINT128	mediaIndependentOutHighCapacityOctets	The total number of octets of data (including those in bad packets) received on a full-duplex link in the direction of the network (excluding framing bits but including FCS octets).
transmittedPackets	UINT128	mediaIndependentOutHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a full-duplex link in the direction of the network.
PortTerminationStats MIB table name: TIMETRA-PORT-MIB.tmnxBundleMemberImaTable Monitored class: bundle.PortTermination			
bundleMemberImaErrorIcpCells	long	tmnxBundleMemberImaErrorIcpCells	tmnxBundleMemberImaErrorIcpCells indicates the number of ICP cells with HEC or CRC-10 errors.
bundleMemberImaFeRxNumFails	long	tmnxBundleMemberImaFeRxNumFails	tmnxBundleMemberImaFeRxNumFails indicates the number of times that a far-end receive alarm is set on the IMA link.
bundleMemberImaFeRxUnuseSecs	long	tmnxBundleMemberImaFeRxUnuseSecs	tmnxBundleMemberImaFeRxUnuseSecs indicates the number of unavailable seconds at the far-end receive link state machine.
bundleMemberImaFeSevErrSecs	long	tmnxBundleMemberImaFeSevErrSecs	tmnxBundleMemberImaFeSevErrSecs indicates the number of one second intervals in which the far-end contains IMA-RDI defects.
bundleMemberImaFeTxNumFails	long	tmnxBundleMemberImaFeTxNumFails	tmnxBundleMemberImaFeTxNumFails indicates the number of times that a far-end transmit alarm is set on the IMA link.
bundleMemberImaFeTxUnuseSecs	long	tmnxBundleMemberImaFeTxUnuseSecs	tmnxBundleMemberImaFeTxUnuseSecs indicates the number of unavailable seconds at the far-end transmit link state machine.
bundleMemberImaFeUnavailSecs	long	tmnxBundleMemberImaFeUnavailSecs	tmnxBundleMemberImaFeUnavailSecs indicates the number of unavailable seconds at the near-end.
bundleMemberImaLstRxIcpCells	long	tmnxBundleMemberImaLstRxIcpCells	tmnxBundleMemberImaLstRxIcpCells indicates the number of lost ICP cells at the expected offset.
bundleMemberImaNeRxNumFails	long	tmnxBundleMemberImaNeRxNumFails	tmnxBundleMemberImaNeRxNumFails indicates the number of times that a near-end receive alarm is set on the IMA link.

5620 SAM counter name	Type	MIB counter name	Description
bundleMemberImaNeRxUnuseSecs	long	tmnxBundleMemberImaNeRxUnuseSecs	tmnxBundleMemberImaNeRxUnuseSecs indicates the number of unavailable seconds at the near-end receive link state machine.
bundleMemberImaNeSevErrSecs	long	tmnxBundleMemberImaNeSevErrSecs	tmnxBundleMemberImaNeSevErrSecs indicates the number of one second intervals in which thirty percent or more of the near-end ICP cells are in violation, or link defects have occurred.
bundleMemberImaNeTxNumFails	long	tmnxBundleMemberImaNeTxNumFails	tmnxBundleMemberImaNeTxNumFails indicates the number of times that a near-end transmit alarm is set on the IMA link.
bundleMemberImaNeTxUnuseSecs	long	tmnxBundleMemberImaNeTxUnuseSecs	tmnxBundleMemberImaNeTxUnuseSecs indicates the number of unavailable seconds at the near-end transmit link state machine.
bundleMemberImaNeUnavailSecs	long	tmnxBundleMemberImaNeUnavailSecs	tmnxBundleMemberImaNeUnavailSecs indicates the number of unavailable seconds at the near-end.
bundleMemberImaOifAnomalies	long	tmnxBundleMemberImaOifAnomalies	tmnxBundleMemberImaOifAnomalies indicates the number of OIF anomalies at the near-end.
bundleMemberImaRxIcpCells	long	tmnxBundleMemberImaRxIcpCells	tmnxBundleMemberImaRxIcpCells indicates the number of ICP cells that have been received on the IMA link.
bundleMemberImaTxIcpCells	long	tmnxBundleMemberImaTxIcpCells	tmnxBundleMemberImaTxIcpCells indicates the number of ICP cells that have been transmitted on the IMA link.
bundleMemberImaViolations	long	tmnxBundleMemberImaViolations	tmnxBundleMemberImaViolations indicates the number of ICP violations including errored, invalid or missing ICP cells.
SystemCpuStats MIB table name: TIMETRA-SYSTEM-MIB.sgiCpuUsage Monitored class: equipment.SystemStatsHolder			
systemCpuUsage	long	sgiCpuUsage	The value of sgiCpuUsage indicates the current CPU utilization for the system.
SystemMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryUsed Monitored class: equipment.SystemStatsHolder			
systemMemoryUsage	long	sgiMemoryUsed	The value of sgiMemoryUsed indicates the total pre-allocated pool memory currently in use on the system.

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Table G-6 ethernetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AdditionalEthernetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortEtherTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
highCapacityPackets1519toMaxFrameSize	UINT128	tmnxPortEtherHCPkts1519toMax	The total number of packets (including bad packets) received that were between 1519 octets in length and the maximum frame size, usually 12287 octets inclusive (excluding framing bits but including FCS octets). The lower 32-bits of this 64-bit counter will equal the value of tmnxPortEtherHCPkts1519toMax. The high 32-bits of this counter will equal the value of tmnxPortEtherHCOverPkts1519toMax.
packets1519toMaxFrameSize	long	tmnxPortEtherPkts1519toMax	The total number of packets received that were longer than 1518 octets but less than the maximum frame size for the particular medium, usually 12287 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
Dot3Stats MIB table name: EtherLike-MIB.dot3StatsTable Monitored class: equipment.PhysicalPort			
alignmentErrors	long	dot3StatsAlignmentErrors	A count of frames received on a particular interface that are not an integral number of octets in length and do not pass the FCS check. The count represented by an instance of this object is incremented when the alignmentError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. This counter does not increment for group encoding schemes greater than 4 bits per group. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsAlignmentErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.7, aAlignmentErrors.

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5620 SAM counter name	Type	MIB counter name	Description
carrierSenseErrors	long	dot3StatsCarrierSenseErrors	The number of times that the carrier sense condition was lost or never asserted when attempting to transmit a frame on a particular interface. The count represented by an instance of this object is incremented at most once per transmission attempt, even if the carrier sense condition fluctuates during a transmission attempt. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.13, aCarrierSenseErrors.
deferredTransmissions	long	dot3StatsDeferredTransmissions	A count of frames for which the first transmission attempt on a particular interface is delayed because the medium is busy. The count represented by an instance of this object does not include frames involved in collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.9, aFramesWithDeferredXmissions.
duplex	int	dot3StatsDuplexStatus	The current mode of operation of the MAC entity. 'unknown' indicates that the current duplex mode could not be determined. Management control of the duplex mode is accomplished through the MAU MIB. When an interface does not support autonegotiation, or when autonegotiation is not enabled, the duplex mode is controlled using ifMauDefaultType. When autonegotiation is supported and enabled, duplex mode is controlled using ifMauAutoNegAdvertisedBits. In either case, the currently operating duplex mode is reflected both in this object and in ifMauType. Note that this object provides redundant information with ifMauType. Normally, redundant objects are discouraged. However, in this instance, it allows a management application to determine the duplex status of an interface without having to know every possible value of ifMauType. This was felt to be sufficiently valuable to justify the redundancy. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.32, aDuplexStatus.

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5620 SAM counter name	Type	MIB counter name	Description
excessiveCollisions	long	dot3StatsExcessiveCollisions	A count of frames for which transmission on a particular interface fails due to excessive collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.11, aFramesAbortedDueToXSColls.
fcsErrors	long	dot3StatsFCSErrors	A count of frames received on a particular interface that are an integral number of octets in length but do not pass the FCS check. This count does not include frames received with frame-too-long or frame-too-short error. The count represented by an instance of this object is incremented when the frameCheckError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. Note: Coding errors detected by the physical layer for speeds above 10 Mb/s will cause the frame to fail the FCS check. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFCSErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.6, aFrameCheckSequenceErrors.

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5620 SAM counter name	Type	MIB counter name	Description
frameTooLongs	long	dot3StatsFrameTooLongs	A count of frames received on a particular interface that exceed the maximum permitted frame size. The count represented by an instance of this object is incremented when the frameTooLong status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. For interfaces operating at 10 Gb/s, this counter can roll over in less than 80 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFrameTooLongs object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.25, aFrameTooLongErrors.
internalMacReceiveErrors	long	dot3StatsInternalMacReceiveErrors	A count of frames for which reception on a particular interface fails due to an internal MAC sublayer receive error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsFrameTooLongs object, the dot3StatsAlignmentErrors object, or the dot3StatsFCSErrors object. The precise meaning of the count represented by an instance of this object is implementation-specific. In particular, an instance of this object may represent a count of receive errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacReceiveErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.15, aFramesLostDueToIntMACRcvError.

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5620 SAM counter name	Type	MIB counter name	Description
internalMacTransmitErrors	long	dot3StatsInternalMacTransmitErrors	A count of frames for which transmission on a particular interface fails due to an internal MAC sublayer transmit error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsLateCollisions object, the dot3StatsExcessiveCollisions object, or the dot3StatsCarrierSenseErrors object. The precise meaning of the count represented by an instance of this object is implementation- specific. In particular, an instance of this object may represent a count of transmission errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacTransmitErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.12, aFramesLostDueToIntMACXmitError.
lateCollisions	long	dot3StatsLateCollisions	The number of times that a collision is detected on a particular interface later than one slotTime into the transmission of a packet. A (late) collision included in a count represented by an instance of this object is also considered as a (generic) collision for purposes of other collision-related statistics. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.10, aLateCollisions.

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5620 SAM counter name	Type	MIB counter name	Description
multipleCollisionFrames	long	dot3StatsMultipleCollisionFrames	A count of frames that are involved in more than one collision and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsSingleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.4, aMultipleCollisionFrames.
singleCollisionFrames	long	dot3StatsSingleCollisionFrames	A count of frames that are involved in a single collision, and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsMultipleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.3, aSingleCollisionFrames.
sqeTestErrors	long	dot3StatsSQETestErrors	A count of times that the SQE TEST ERROR is received on a particular interface. The SQE TEST ERROR is set in accordance with the rules for verification of the SQE detection mechanism in the PLS Carrier Sense Function as described in IEEE Std. 802.3, 2000 Edition, section 7.2.4.6. This counter does not increment on interfaces operating at speeds greater than 10 Mb/s, or on interfaces operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 7.2.4.6, also 30.3.2.1.4, aSQETestErrors.

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5620 SAM counter name	Type	MIB counter name	Description
symbolErrors	long	dot3StatsSymbolErrors	For an interface operating at 100 Mb/s, the number of times there was an invalid data symbol when a valid carrier was present. For an interface operating in half-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than slotTime, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' or 'carrier extend error' on the GMII. For an interface operating in full-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' on the GMII. For an interface operating at 10 Gb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Receive Error' on the XGMII. The count represented by an instance of this object is incremented at most once per carrier event, even if multiple symbol errors occur during the carrier event. This count does not increment if a collision is present. This counter does not increment when the interface is operating at 10 Mb/s. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsSymbolErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.2.1.5, aSymbolErrorDuringCarrier.
EthernetHighCapacityStats MIB table name: HC-RMON-MIB.etherStatsHighCapacityTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
packets1024to1518Octets	UINT128	etherStatsHighCapacityPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
packets128to255Octets	UINT128	etherStatsHighCapacityPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	UINT128	etherStatsHighCapacityPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	UINT128	etherStatsHighCapacityPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	UINT128	etherStatsHighCapacityPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	UINT128	etherStatsHighCapacityPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	UINT128	etherStatsHighCapacityOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). If the network is half-duplex Fast Ethernet, this object can be used as a reasonable estimate of utilization. If greater precision is desired, the etherStatsHighCapacityPkts and etherStatsHighCapacityOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (.96 + .64) + (Octets * .08) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent. This table is not appropriate for monitoring full-duplex ethernets. If the network is a full-duplex ethernet and the mediaIndependentTable is monitoring that network, the utilization can be calculated as follows: 1) Determine the utilization of the inbound path by using the appropriate equation (for ethernet or fast ethernet) to determine the utilization, substituting mediaIndependentInPkts for etherStatsHighCapacityPkts, and mediaIndependentInOctets for etherStatsHighCapacityOctets. Call the resulting utilization inUtilization. 2) Determine the utilization of the outbound path by using the same equation to determine the utilization, substituting mediaIndependentOutPkts for etherStatsHighCapacityPkts, and mediaIndependentOutOctets for etherStatsHighCapacityOctets. Call the resulting utilization outUtilization. 3) The utilization is the maximum of inUtilization and outUtilization. This metric shows the amount of percentage of bandwidth that is left before congestion will be experienced on the link.
totalPackets	UINT128	etherStatsHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
EthernetStats MIB table name: RMON-MIB.etherStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
broadcastPackets	long	etherStatsBroadcastPkts	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets.

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5620 SAM counter name	Type	MIB counter name	Description
collisions	long	etherStatsCollisions	The best estimate of the total number of collisions on this Ethernet segment. The value returned will depend on the location of the RMON probe. Section 8.2.1.3 (10BASE-5) and section 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision, in the receive mode, if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coax segments to which the repeater is connected.
crcAlignErrors	long	etherStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
dropEvents	long	etherStatsDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
fragments	long	etherStatsFragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that it is entirely normal for etherStatsFragments to increment. This is because it counts both runts (which are normal occurrences due to collisions) and noise hits.

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5620 SAM counter name	Type	MIB counter name	Description
jabbers	long	etherStatsJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different than the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition where any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
multicastPackets	long	etherStatsMulticastPkts	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address.
oversizePackets	long	etherStatsOversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
packets1024to1518Octets	long	etherStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).
packets128to255Octets	long	etherStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	long	etherStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	long	etherStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	long	etherStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	long	etherStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

5620 SAM counter name	Type	MIB counter name	Description
totalOctets	long	etherStatsOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). This object can be used as a reasonable estimate of 10-Megabit ethernet utilization. If greater precision is desired, the etherStatsPkts and etherStatsOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (9.6 + 6.4) + (Octets * .8) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent.
totalPackets	long	etherStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
undersizePackets	long	etherStatsUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.

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Table G-7 isis statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceLevelOneReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelOneSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).

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5620 SAM counter name	Type	MIB counter name	Description
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
LinkStatePduSiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			
csnpDropped	long	vRtrIsisCSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisCSNPDrop.
csnpReceived	long	vRtrIsisCSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisCSNPRecd.

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5620 SAM counter name	Type	MIB counter name	Description
csnpRetransmitted	long	vRtrIsisCSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisCSNPRetrans.
csnpSent	long	vRtrIsisCSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisCSNPSent.
helloDropped	long	vRtrIsisIIHDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisIIHDrop.
helloReceived	long	vRtrIsisIIHRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisIIHRecd.
helloRetransmitted	long	vRtrIsisIIHRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisIIHRetrans.
helloSent	long	vRtrIsisIIHSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisIIHSent.
lspDropped	long	vRtrIsisLSPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisLSPDrop.
lspReceived	long	vRtrIsisLSPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisLSPRecd.
lspRetransmitted	long	vRtrIsisLSPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisLSPRetrans.
lspSent	long	vRtrIsisLSPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisLSPSent.
psnpDropped	long	vRtrIsisPSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisPSNPDrop.
psnpReceived	long	vRtrIsisPSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisPSNPRecd.
psnpRetransmitted	long	vRtrIsisPSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisPSNPRetrans.
psnpSent	long	vRtrIsisPSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisPSNPSent.
unknownDropped	long	vRtrIsisUnknownDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisUnknownDrop.
unknownReceived	long	vRtrIsisUnknownRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisUnknownRecd.

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5620 SAM counter name	Type	MIB counter name	Description
unknownRetransmitted	long	vRtrIsisUnknownRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisUnknownRetrans.
unknownSent	long	vRtrIsisUnknownSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisUnknownSent.
SiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			
cspfDroppedRequests	long	vRtrIsisCSPFDroppedRequests	vRtrIsisCSPFDroppedRequests maintains the number of dropped CSPF requests by the protocol.
cspfPathsFound	long	vRtrIsisCSPFPathsFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which paths satisfying the constraints were found.
cspfPathsNotFound	long	vRtrIsisCSPFPathsNotFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which no paths satisfying the constraints were found.
cspfRequests	long	vRtrIsisCSPFRequests	vRtrIsisCSPFRequests maintains the number of CSPF requests made to the protocol.
initiatedPurges	long	vRtrIsisInitiatedPurges	The value of vRtrIsisInitiatedPurges counts the number of times purges have been initiated.
lspRegenerations	long	vRtrIsisLSPRegenerations	The value of vRtrIsisLSPRegenerations maintains the count of LSP regenerations.
spfRuns	long	vRtrIsisSpfRuns	The value of vRtrIsisSpfRuns indicates the number of times shortest path first calculations have been made.

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Table G-8 ldp statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpIfStatsTable Monitored class: ldp.Interface			
existingAdjacencies	long	vRtrLdpIfExistingAdjacencies	The value of vRtrLdpIfExistingAdjacencies gives a count of the total active adjacencies on this LDP interface or with this targeted peer.
SessionStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpSessionStatsTable Monitored class: ldp.Session			

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5620 SAM counter name	Type	MIB counter name	Description
addressMessagesReceived	long	vRtrLdpSessStatsAddrIn	The value of vRtrLdpSessStatsAddrIn counts the number of Address Messages that have been received during this session.
addressMessagesSent	long	vRtrLdpSessStatsAddrOut	The value of vRtrLdpSessStatsAddrOut counts the number of Address Messages that have been sent during this session.
addressWithdrawMessagesReceived	long	vRtrLdpSessStatsAddrWithdrawIn	The value of vRtrLdpSessStatsAddrWithdrawIn counts the number of Address Withdraw Messages that have been received during this session.
addressWithdrawMessagesSent	long	vRtrLdpSessStatsAddrWithdrawOut	The value of vRtrLdpSessStatsAddrWithdrawOut counts the number of Address Withdraw Messages that have been sent during this session.
fecReceived	long	vRtrLdpSessStatsFECRecv	The value of vRtrLdpSessStatsFECRecv counts the number of FECs received for this session.
fecSent	long	vRtrLdpSessStatsFECSent	The value of vRtrLdpSessStatsFECSent counts the number of FECs sent for this session.
helloMessagesReceived	long	vRtrLdpSessStatsHelloIn	The value of vRtrLdpSessStatsHelloIn counts the number of Hello Messages that have been received during this session.
helloMessagesSent	long	vRtrLdpSessStatsHelloOut	The value of vRtrLdpSessStatsHelloOut counts the number of Hello Messages that have been sent during this session.
initMessagesReceived	long	vRtrLdpSessStatsInitIn	The value of vRtrLdpSessStatsInitIn counts the number of Init Messages that have been received during this session.
initMessagesSent	long	vRtrLdpSessStatsInitOut	The value of vRtrLdpSessStatsInitOut counts the number of Init Messages that have been sent during this session.
keepAliveMessagesReceived	long	vRtrLdpSessStatsKeepaliveIn	The value of vRtrLdpSessStatsKeepaliveIn counts the number of Keepalive Messages that have been received during this session.
keepAliveMessagesSent	long	vRtrLdpSessStatsKeepaliveOut	The value of vRtrLdpSessStatsKeepaliveOut counts the number of Keepalive Messages that have been sent during this session.
labelAbortsReceived	long	vRtrLdpSessStatsLabelAbortIn	The value of vRtrLdpSessStatsLabelAbortIn counts the number of Label Abort Messages that have been received during this session.
labelAbortsSent	long	vRtrLdpSessStatsLabelAbortOut	The value of vRtrLdpSessStatsLabelAbortOut counts the number of Label Abort Messages that have been sent during this session.

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5620 SAM counter name	Type	MIB counter name	Description
labelMappingsReceived	long	vRtrLdpSessStatsLabelMappingIn	The value of vRtrLdpSessStatsLabelMappingIn counts the number of Label Mapping Messages that have been received during this session.
labelMappingsSent	long	vRtrLdpSessStatsLabelMappingOut	The value of vRtrLdpSessStatsLabelMappingOut counts the number of Label Mapping Messages that have been sent during this session.
labelReleasesReceived	long	vRtrLdpSessStatsLabelReleaseIn	The value of vRtrLdpSessStatsLabelReleaseIn counts the number of Label Release Messages that have been received during this session.
labelReleasesSent	long	vRtrLdpSessStatsLabelReleaseOut	The value of vRtrLdpSessStatsLabelReleaseOut counts the number of Label Release Messages that have been sent during this session.
labelRequestsReceived	long	vRtrLdpSessStatsLabelRequestIn	The value of vRtrLdpSessStatsLabelRequestIn counts the number of Label Request Messages that have been received during this session.
labelRequestsSent	long	vRtrLdpSessStatsLabelRequestOut	The value of vRtrLdpSessStatsLabelRequestOut counts the number of Label Request Messages that have been sent during this session.
labelWithdrawsReceived	long	vRtrLdpSessStatsLabelWithdrawIn	The value of vRtrLdpSessStatsLabelWithdrawIn counts the number of Label Withdraw Messages that have been received during this session.
labelWithdrawsSent	long	vRtrLdpSessStatsLabelWithdrawOut	The value of vRtrLdpSessStatsLabelWithdrawOut counts the number of Label Withdraw Messages that have been sent during this session.
linkAdjacencies	long	vRtrLdpSessStatsLinkAdj	The value of vRtrLdpSessStatsLinkAdj specifies the number of link adjacencies for this session.
notificationMessagesReceived	long	vRtrLdpSessStatsNotificationIn	The value of vRtrLdpSessStatsNotificationIn counts the number of Notification Messages that have been received during this session.
notificationMessagesSent	long	vRtrLdpSessStatsNotificationOut	The value of vRtrLdpSessStatsNotificationOut counts the number of Notification Messages that have been sent during this session.
targetedAdjacencies	long	vRtrLdpSessStatsTargAdj	The value of vRtrLdpSessStatsTargAdj specifies the number of targeted adjacencies for this session.
SiteStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpStatsTable Monitored class: ldp.Site			

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5620 SAM counter name	Type	MIB counter name	Description
activeAdjacencies	long	vRtrLdpStatsActiveAdjacencies	The value of vRtrLdpStatsActiveAdjacencies specifies the number of active adjacencies (i.e. established sessions) associated with the LDP instance.
activeInterfaces	long	vRtrLdpStatsActiveInterfaces	The value of vRtrLdpStatsActiveInterfaces specifies the number of active (i.e. operationally up) interfaces associated with the LDP instance.
activeSessions	long	vRtrLdpStatsActiveSessions	The value of vRtrLdpStatsActiveSessions specifies the number of active sessions (i.e. session in some form of creation) associated with the LDP instance.
activeTargetedSessions	long	vRtrLdpStatsActiveTargSessions	The value of vRtrLdpStatsActiveTargSessions specifies the number of active (i.e. operationally up) targeted sessions associated with the LDP instance.
addressFECsReceived	long	vRtrLdpStatsAddrFECRecv	The value of vRtrLdpStatsAddrFECRecv specifies the number of Address FECs received by the LDP instance from its neighbors.
addressFECsSent	long	vRtrLdpStatsAddrFECSent	The value of vRtrLdpStatsAddrFECSent specifies the number of Address FECs sent by the LDP instance to its neighbors.
attemptedSessions	long	vRtrLdpStatsAttemptedSessions	The value of vRtrLdpStatsAttemptedSessions specifies the total number of attempted sessions for this LDP instance.
badLdpIdentifierErrors	long	vRtrLdpStatsBadLdpIdentifierErrors	The value of vRtrLdpStatsBadLdpIdentifierErrors gives the number of Bad LDP Identifier Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badMessageLengthErrors	long	vRtrLdpStatsBadMessageLengthErrors	The value of vRtrLdpStatsBadMessageLengthErrors gives the number of Bad Message Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badPduLengthErrors	long	vRtrLdpStatsBadPduLengthErrors	The value of vRtrLdpStatsBadPduLengthErrors gives the number of Bad Pdu Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badTlvLengthErrors	long	vRtrLdpStatsBadTlvLengthErrors	The value of vRtrLdpStatsBadTlvLengthErrors gives the number of Bad TLV Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.

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5620 SAM counter name	Type	MIB counter name	Description
inactiveInterfaces	long	vRtrLdpStatsInactiveInterfaces	The value of vRtrLdpStatsInactiveInterfaces specifies the number of inactive (i.e. operationally down) interfaces associated with the LDP instance.
inactiveTargetedSessions	long	vRtrLdpStatsInactiveTargSessions	The value of vRtrLdpStatsInactiveTargSessions specifies the number of inactive (i.e. operationally down) targeted sessions associated with the LDP instance.
keepAliveExpiredErrors	long	vRtrLdpStatsKeepAliveExpiredErrors	The value of vRtrLdpStatsKeepAliveExpiredErrors gives the number of Session Keep Alive Timer Expired Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
malformedTlvValueErrors	long	vRtrLdpStatsMalformedTlvValueErrors	The value of vRtrLdpStatsMalformedTlvValueErrors gives the number of Malformed TLV Value Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
operDownEvents	long	vRtrLdpStatsOperDownEvents	The value of vRtrLdpStatsOperDownEvents specifies the number of times the LDP instance has gone operationally down since the instance was created.
serviceFECsReceived	long	vRtrLdpStatsSvcFECRecv	The value of vRtrLdpStatsSvcFECRecv specifies the number of Service FECs received by the LDP instance from its neighbors.
serviceFECsSent	long	vRtrLdpStatsSvcFECSent	The value of vRtrLdpStatsSvcFECSent specifies the number of Service FECs sent by the LDP instance to its neighbors.
sessionRejectedAdvertisementModeErrors	long	vRtrLdpStatsSessRejAdvErrors	The value of vRtrLdpStatsSessRejAdvErrors gives the total number of Session Rejected/Parameters Advertisement Mode Error Notification Messages sent or received by this LDP instance.
sessionRejectedLabelRangeErrors	long	vRtrLdpStatsSessRejLabelRangeErrors	The value of vRtrLdpStatsSessRejLabelRangeErrors gives the total number of Session Rejected/Parameters Label Range Error Notification Messages sent or received by this LDP instance.
sessionRejectedMaxPduLengthErrors	long	vRtrLdpStatsSessRejMaxPduErrors	The value of vRtrLdpStatsSessRejMaxPduErrors gives the total number of Session Rejected/Parameters Max Pdu Length Error Notification Messages sent or received by this LDP instance.

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5620 SAM counter name	Type	MIB counter name	Description
sessionRejectedNoHelloErrors	long	vRtrLdpStatsSessRejNoHelloErrors	The value of vRtrLdpStatsSessRejNoHelloErrors gives the total number of Session Rejected/No Hello Error Notification Messages sent or received by this LDP instance.
shutdownNotificationsReceived	long	vRtrLdpStatsShutdownNotifRecv	The value of vRtrLdpStatsShutdownNotifRecv gives the number of Shutdown Notifications received related to sessions associated with this LDP instance.
shutdownNotificationsSent	long	vRtrLdpStatsShutdownNotifSent	The value of vRtrLdpStatsShutdownNotifSent gives the number of Shutdown Notifications sent related to sessions associated with this LDP instance.
TargetedPeerStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpIfStatsTable Monitored class: ldp.TargetedPeer			
existingAdjacencies	long	vRtrLdpIfExistingAdjacencies	The value of vRtrLdpIfExistingAdjacencies gives a count of the total active adjacencies on this LDP interface or with this targeted peer.

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Table G-9 mpls statistics

5620 SAM counter name	Type	MIB counter name	Description
DynamicLspStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatTable Monitored class: mpls.DynamicLsp			
configuredPaths	long	vRtrMplsLspConfiguredPaths	The number of paths configured for this LSP.
operationalPaths	long	vRtrMplsLspOperationalPaths	The number of operational paths for this LSP. This includes the path currently active, as well as operational standby paths.
pathChanges	long	vRtrMplsLspPathChanges	The number of path changes this LSP has had. For every path change (path down, path up, path change), a corresponding syslog/trap (if enabled) is generated for it.
standbyPaths	long	vRtrMplsLspStandbyPaths	The number of standby paths configured for this LSP.
timeSinceLastPathChange	long	vRtrMplsLspLastPathChange	The time in 10-millisecond units since the last change occurred on this LSP.
timeSinceLastPrimaryUpState	long	vRtrMplsLspPrimaryTimeUp	The total time in 10-millisecond units that this LSP's primary path has been operational. For example, the percentage contribution of the primary path to the operational time is given by (vRtrMplsLspPrimaryTimeUp/vRtrMplsLspTimeUp * 100) .

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5620 SAM counter name	Type	MIB counter name	Description
LspPathStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspPathStatTable Monitored class: mpls.LspPath			
cspfQueries	long	vRtrMplsLspPathCspfQueries	The value of vRtrMplsLspPathCspfQueries specifies the number of CSPF queries that have been made for this LSP path.
retryAttempts	long	vRtrMplsLspPathRetryAttempts	The number of unsuccessful attempts which have been made to signal this path. As soon as the path gets signalled, this is set to 0.
timeDown	long	vRtrMplsLspPathTimeDown	The total time in 10-millisecond units that this LSP Path has not been operational.
timeUp	long	vRtrMplsLspPathTimeUp	The total time in 10-millisecond units that this LSP path has been operational. For example, the percentage up time can be determined by computing (vRtrMplsLspPathTimeUp/vRtrMplsLspAge * 100).
transitionCount	long	vRtrMplsLspPathTransitionCount	The object vRtrMplsLspPathTransitionCount maintains the number of transitions that have occurred for this LSP.
LspStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatTable Monitored classes: • mpls.DynamicLsp • mpls.StaticLsp • mpls.BypassOnlyLsp			
age	long	vRtrMplsLspAge	The age (i.e., time from creation till now) of this LSP in 10-millisecond periods.
timeSinceLastDownState	long	vRtrMplsLspTimeDown	The total time in 10-millisecond units that this LSP has not been operational.
timeSinceLastTransition	long	vRtrMplsLspLastTransition	The time in 10-millisecond units since the last transition occurred on this LSP.
timeSinceLastUpState	long	vRtrMplsLspTimeUp	The total time in 10-millisecond units that this LSP has been been operational. For example, the percentage up time can be determined by computing (vRtrMplsLspTimeUp/vRtrMplsLspAge * 100).
transitions	long	vRtrMplsLspTransitions	The number of state transitions (up -> down and down -> up) this LSP has undergone.
MplsInterfaceStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsIfStatTable Monitored class: mpls.Interface			
receiveOctets	UINT128	vRtrMplsIfRxOctetCount	The total number of bytes in MPLS labeled packets received on this interface.
receivePackets	UINT128	vRtrMplsIfRxPktCount	The total number of MPLS labeled packets received on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
transmitOctets	UINT128	vRtrMplsIfTxOctetCount	The total number of bytes in MPLS labeled packets transmitted on this interface.
transmitPackets	UINT128	vRtrMplsIfTxPktCount	The total number of MPLS labeled packets transmitted from this interface.
SiteStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsGeneralStatTable Monitored class: mpls.Site			
dynamicOriginate	long	vRtrMplsGeneralDynamicLspOriginate	This object counts the number of dynamic LSPs that originate at this virtual router.
dynamicTerminate	long	vRtrMplsGeneralDynamicLspTerminate	This object counts the number of dynamic LSPs that terminate at this virtual router.
staticOriginate	long	vRtrMplsGeneralStaticLspOriginate	This object counts the number of static LSPs that originate at this virtual router.
staticTerminate	long	vRtrMplsGeneralStaticLspTerminate	This object counts the number of static LSPs that terminate at this virtual router.

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Table G-10 ospf statistics

5620 SAM counter name	Type	MIB counter name	Description
AreaBasicStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfAreaTable Monitored class: ospf.AreaSite			
nssaTranslatorEvents	long	tmnxOspfAreaNssaTranslatorEvents	The value of tmnxOspfAreaNssaTranslatorEvents indicates the number of Translator State changes that have occurred since the last boot-up.
totalLSACount	long	tmnxOspfAreaScopeLsaCount	The value of tmnxOspfAreaScopeLsaCount indicates the total number of Area-Scope link state advertisements in this area's link-state database.
totalSpfRuns	long	tmnxOspfAreaSpfRuns	The value of tmnxOspfAreaSpfRuns indicates the number of times that the intra-area route table has been calculated using this area's link-state database. This is typically done using Dijkstra's algorithm.
totalUnknownLSACount	long	tmnxOspfAreaScopeUnkLsaCount	The value of tmnxOspfAreaScopeUnkLsaCount indicates the total number of unknown Area-Scope link-state advertisements in this area's link-state database.
InterfaceGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
events	long	tmnxOspfIfEvents	The value of tmnxOspfIfEvents indicates the number of times this OSPF interface has changed its state, or an error has occurred.

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5620 SAM counter name	Type	MIB counter name	Description
InterfaceReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF Database Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
lsasWithBadChecksums	long	tmnxOspfIfRxBadChecksums	The value of tmnxOspfIfRxBadChecksums indicates the count of LSAs received with bad checksums.

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5620 SAM counter name	Type	MIB counter name	Description
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
authorizationFailures	long	tmnxOspfIfAuthFailures	The value of tmnxOspfIfAuthFailures indicates the total number of OSPF packets received with an invalid authorization key since tmnxOspfAdminState was last set to 'enabled'.
badAreas	long	tmnxOspfIfBadAreas	The value of tmnxOspfIfBadAreas indicates the total number of OSPF packets received with an area mismatch since tmnxOspfAdminState was last set to 'enabled'.
badAuthorizationTypes	long	tmnxOspfIfBadAuthTypes	The value of tmnxOspfIfBadAuthTypes indicates the total number of OSPF packets received with an invalid authorization type since tmnxOspfAdminState was last set to 'enabled'.
badDeadIntervals	long	tmnxOspfIfBadDeadIntervals	The value of tmnxOspfIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badDestinationAddresses	long	tmnxOspfIfBadDstAddrs	The value of tmnxOspfIfBadDstAddrs indicates the total number of OSPF packets received with the incorrect IP destination address since tmnxOspfAdminState was last set to 'enabled'.
badHelloIntervals	long	tmnxOspfIfBadHelloIntervals	The value of tmnxOspfIfBadHelloIntervals indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badLengths	long	tmnxOspfIfBadLengths	The value of tmnxOspfIfBadLengths indicates the total number of OSPF packets received on this interface with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badNeighbors	long	tmnxOspfIfBadNeighbors	The value of tmnxOspfIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the information this router has for the neighbor since tmnxOspfAdminState was last set to 'enabled'.
badNetworks	long	tmnxOspfIfBadNetworks	The value of tmnxOspfIfBadNetworks indicates the total number of OSPF packets received with invalid network or mask since tmnxOspfAdminState was last set to 'enabled'.
badOptions	long	tmnxOspfIfBadOptions	The value of tmnxOspfIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this interface or area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfIfBadPacketTypes	The value of tmnxOspfIfBadPacketTypes indicates the total number of OSPF packets received with an invalid OSPF packet type since tmnxOspfAdminState was last set to 'enabled'.
badVersions	long	tmnxOspfIfBadVersions	The value of tmnxOspfIfBadVersions indicates the total number of OSPF packets received with bad OSPF version numbers since tmnxOspfAdminState was last set to 'enabled'.
badVirtualLinks	long	tmnxOspfIfBadVirtualLinks	The value of tmnxOspfIfBadVirtualLinks indicates the total number of OSPF packets received on this interface that are destined to a virtual link that does not exist since tmnxOspfAdminState was last set to 'enabled'.
discardPackets	long	tmnxOspfIfDiscardPackets	The value of tmnxOspfIfDiscardPackets indicates the total number of OSPF packets discarded on this interface since tmnxOspfAdminState was last set to 'enabled'.
retransmitOuts	long	tmnxOspfIfRetransmitOuts	The value of tmnxOspfIfRetransmitOuts indicates the total number of OSPF Retransmits sent on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF Database Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
NeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			
events	long	tmnxOspfNbrEvents	The value of tmnxOspfNbrEvents indicates the number of times this neighbor relationship has changed state, or an error has occurred.
retransmissionQueueLength	long	tmnxOspfNbrLsRetransQLen	The value of tmnxOspfNbrLsRetransQLen indicates the current length of the retransmission queue.
NeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			
badMtus	long	tmnxOspfNbrBadMTUs	The value of tmnxOspfNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.
badNeighborStates	long	tmnxOspfNbrBadNbrStates	The value of tmnxOspfNbrBadNbrStates indicates the total number of OSPF packets received when the neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfNbrBadPackets	The value of tmnxOspfNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfNbrBadSeqNums	The value of tmnxOspfNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
duplicates	long	tmnxOspfNbrDuplicates	The value of tmnxOspfNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfNbrLsaInstallFailed	The value of tmnxOspfNbrLsaInstallFailed indicates the total number of times an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfNbrLsaNotInLsdbs	The value of tmnxOspfNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
numberOfRestarts	long	tmnxOspfNbrNumRestarts	The value of tmnxOspfNbrNumRestarts indicates the number of times the neighbor has attempted restart.
optionMismatches	long	tmnxOspfNbrOptionMismatches	The value of tmnxOspfNbrOptionMismatches indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
SiteStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfStatisticsTable Monitored class: ospf.Site			
addRouteFailed	long	tmnxOspfRoutesAddsFailed	The value of tmnxOspfRoutesAddsFailed indicates the number of times an attempt to add a route to the Route Table Manager (RTM) failed for this OSPF instance.
cspfDroppedRequests	long	tmnxOspfCSPFDroppedRequests	The value of tmnxOspfCSPFDroppedRequests indicates the number of dropped CSPF requests made by the OSPF protocol.
cspfPathsFound	long	tmnxOspfCSPFPathsFound	The value of tmnxOspfCSPFPathsFound indicates the number of of paths found for the requests made to OSPF protocol.
cspfPathsNotFound	long	tmnxOspfCSPFPathsNotFound	The value of tmnxOspfCSPFPathsNotFound indicates the number of of paths not found for the requests made to OSPF protocol.
cspfRequests	long	tmnxOspfCSPFRequests	The value of tmnxOspfCSPFRequests indicates the number of CSPF requests made to the OSPF protocol.
deleteRouteFailed	long	tmnxOspfRoutesDelsFailed	The value of tmnxOspfRoutesDelsFailed indicates the number of times an attempt to delete a route from the Route Table Manager (RTM) failed for this instance of OSPF.
inOverflowCount	long	tmnxOspfNumTimesInOverflow	The value of tmnxOspfNumTimesInOverflow indicates the count of the number of times the system was in the overflow state.
inOverloadCount	long	tmnxOspfNumTimesInOverload	The value of tmnxOspfNumTimesInOverload indicates the count of the number of times the system was overloaded.
modifyRouteFailed	long	tmnxOspfRoutesModsFailed	The value of tmnxOspfRoutesModsFailed indicates the number of times an attempt to modify a route in the Route Table Manager (RTM) failed for this instance of OSPF.
newLsasOriginated	long	tmnxOspfOriginateNewLsas	The value of tmnxOspfOriginateNewLsas indicates the number of new link-state advertisements that have been originated. This number is incremented each time the router originates a new LSA.

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5620 SAM counter name	Type	MIB counter name	Description
newLsasReceived	long	tmnxOspfRxNewLsas	The value of tmnxOspfRxNewLsas indicates the number of link-state advertisements received determined to be new instantiations. This number does not include newer instantiations of self-originated link-state advertisements.
spfAttemptsFailed	long	tmnxOspfSpfAttemptsFailed	The value of tmnxOspfSpfAttemptsFailed indicates the number of times an attempt to run SPF has failed because SPF runs have been stopped as a result of insufficient memory resources.
VirtualLinkGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
events	long	tmnxOspfVirtIfEvents	The value of tmnxOspfVirtIfEvents indicates the number of state changes or error events on this Virtual Link.
VirtualLinkReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
databaseDescriptionPackets	long	tmnxOspfVirtIfRxDBDs	The value of tmnxOspfVirtIfRxDBDs indicates the total number of OSPF Database Description packets received on this virtual interface.
databaseDescriptionPackets	long	tmnxOspfVirtIfTxDBDs	The value of tmnxOspfVirtIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this virtual interface.
helloPackets	long	tmnxOspfVirtIfRxHellos	The value of tmnxOspfVirtIfRxHellos indicates the total number of OSPF Hello packets received on this virtual interface.
helloPackets	long	tmnxOspfVirtIfTxHellos	The value of tmnxOspfVirtIfTxHellos indicates the total number of OSPF Hello packets transmitted on this virtual interface since it was created.
linkStateAcknowledgements	long	tmnxOspfVirtIfRxLSAcks	The value of tmnxOspfVirtIfRxLSAcks indicates the total number of Link State Acknowledgements received on this virtual interface.
linkStateAcknowledgements	long	tmnxOspfVirtIfTxLSAcks	The value of tmnxOspfVirtIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfRxLSRs	The value of tmnxOspfVirtIfRxLSRs indicates the total number of OSPF Link State Requests (LSRs) received on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfTxLSRs	The value of tmnxOspfVirtIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this virtual interface.

5620 SAM counter name	Type	MIB counter name	Description
linkStateUpdates	long	tmnxOspfVirtIfRxLSUs	The value of tmnxOspfVirtIfRxLSUs indicates the total number of OSPF Link State Updates (LSUs) received on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfTxLSUs	The value of tmnxOspfVirtIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this virtual interface.
lsasWithBadChecksums	long	tmnxOspfVirtIfRxBadChecksums	The value of tmnxOspfVirtIfRxBadChecksums indicates the count of LSAs received with bad checksums.
totalPackets	long	tmnxOspfVirtIfRxPackets	The value of tmnxOspfVirtIfRxPackets indicates the total number of OSPF packets received on this virtual interface since it was created.
totalPackets	long	tmnxOspfVirtIfTxPackets	The value of tmnxOspfVirtIfTxPackets indicates the total number of OSPF packets transmitted on this virtual interface since it was created.
VirtualLinkStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
authorizationFailures	long	tmnxOspfVirtIfAuthFailures	The value of tmnxOspfVirtIfAuthFailures indicates the total number of OSPF packets received on this virtual interface with invalid authentication keys.
badAreas	long	tmnxOspfVirtIfBadAreas	The value of tmnxOspfVirtIfBadAreas indicates the total number of OSPF packets received on this virtual interface with area mismatches.
badAuthorizationTypes	long	tmnxOspfVirtIfBadAuthTypes	The value of tmnxOspfVirtIfBadAuthTypes indicates the total number of OSPF packets received on this virtual interface with invalid authentication types.
badDeadIntervals	long	tmnxOspfVirtIfBadDeadIntervals	The value of tmnxOspfVirtIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this virtual interface since tmnxOspfAdminState was last set to 'enabled'.
badDestinationAddresses	long	tmnxOspfVirtIfBadDstAddrs	The value of tmnxOspfVirtIfBadDstAddrs indicates the total number of OSPF packets received on this virtual interface with invalid destination IP address.
badHelloIntervals	long	tmnxOspfVirtIfBadHelloIntervls	The value of tmnxOspfVirtIfBadHelloIntervls indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this virtual interface since tmnxOspfAdminState was last set to 'enabled'.

5620 SAM counter name	Type	MIB counter name	Description
badLengths	long	tmnxOspfVirtIfBadLengths	The value of tmnxOspfVirtIfBadLengths indicates the total number of OSPF packets received on this virtual interface with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.
badNeighbors	long	tmnxOspfVirtIfBadNeighbors	The value of tmnxOspfVirtIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the configuration this router has for the neighbor.
badNetworks	long	tmnxOspfVirtIfBadNetworks	The value of tmnxOspfVirtIfBadNetworks indicates the total number of OSPF packets received on this virtual interface with invalid network or mask fields.
badOptions	long	tmnxOspfVirtIfBadOptions	The value of tmnxOspfVirtIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this virtual interface or transit-area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfVirtIfBadPacketTypes	The value of tmnxOspfVirtIfBadPacketTypes indicates the total number of OSPF packets received on this virtual interface with invalid OSPF packet types.
badVersions	long	tmnxOspfVirtIfBadVersions	The value of tmnxOspfVirtIfBadVersions indicates the total number of OSPF packets received on this virtual interface with invalid OSPF version numbers.
discardPackets	long	tmnxOspfVirtIfDiscardPackets	The value of tmnxOspfVirtIfDiscardPackets indicates the total number of OSPF packets discarded on this virtual interface.
retransmitOuts	long	tmnxOspfVirtIfRetransmitOuts	The value of tmnxOspfVirtIfRetransmitOuts indicates the total number of OSPF packets retransmitted on this virtual interface.
VirtualLinkTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
databaseDescriptionPackets	long	tmnxOspfVirtIfRxDBDs	The value of tmnxOspfVirtIfRxDBDs indicates the total number of OSPF Database Description packets received on this virtual interface.
databaseDescriptionPackets	long	tmnxOspfVirtIfTxDBDs	The value of tmnxOspfVirtIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this virtual interface.
helloPackets	long	tmnxOspfVirtIfRxHellos	The value of tmnxOspfVirtIfRxHellos indicates the total number of OSPF Hello packets received on this virtual interface.

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5620 SAM counter name	Type	MIB counter name	Description
helloPackets	long	tmnxOspfVirtIfTxHellos	The value of tmnxOspfVirtIfTxHellos indicates the total number of OSPF Hello packets transmitted on this virtual interface since it was created.
linkStateAcknowledgements	long	tmnxOspfVirtIfRxLSAcks	The value of tmnxOspfVirtIfRxLSAcks indicates the total number of Link State Acknowledgements received on this virtual interface.
linkStateAcknowledgements	long	tmnxOspfVirtIfTxLSAcks	The value of tmnxOspfVirtIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfRxLSRs	The value of tmnxOspfVirtIfRxLSRs indicates the total number of OSPF Link State Requests (LSRs) received on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfTxLSRs	The value of tmnxOspfVirtIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfRxLSUs	The value of tmnxOspfVirtIfRxLSUs indicates the total number of OSPF Link State Updates (LSUs) received on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfTxLSUs	The value of tmnxOspfVirtIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this virtual interface.
totalPackets	long	tmnxOspfVirtIfRxPackets	The value of tmnxOspfVirtIfRxPackets indicates the total number of OSPF packets received on this virtual interface since it was created.
totalPackets	long	tmnxOspfVirtIfTxPackets	The value of tmnxOspfVirtIfTxPackets indicates the total number of OSPF packets transmitted on this virtual interface since it was created.
VirtualNeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtNbrStatsTable Monitored class: ospf.VirtualNeighbor			
events	long	tmnxOspfVirtNbrEvents	The value of tmnxOspfVirtNbrEvents indicates the number of times this virtual link has changed its state, or an error has occurred.
retransmissionQueueLength	long	tmnxOspfVirtNbrLsRetransQLen	The value of tmnxOspfVirtNbrLsRetransQLen indicates the current length of the retransmission queue.
VirtualNeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtNbrStatsTable Monitored class: ospf.VirtualNeighbor			

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5620 SAM counter name	Type	MIB counter name	Description
badMtus	long	tmnxOspfVirtNbrBadMTUs	The value of tmnxOspfVirtNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfVirtNbrBadPackets	The value of tmnxOspfVirtNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfVirtNbrBadSeqNums	The value of tmnxOspfVirtNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
badVirtualNeighborStates	long	tmnxOspfVirtNbrBadNbrStates	The value of tmnxOspfVirtNbrBadNbrStates indicates the total number of OSPF packets received when the virtual neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
duplicates	long	tmnxOspfVirtNbrDuplicates	The value of tmnxOspfVirtNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfVirtNbrLsaInstallFail	The value of tmnxOspfVirtNbrLsaInstallFail indicates the total number of times when an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfVirtNbrLsaNotInLsdbs	The value of tmnxOspfVirtNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.
numberOfRestarts	long	tmnxOspfVirtNbrNumRestarts	The value of tmnxOspfVirtNbrNumRestarts indicates the number of times the virtual neighbor has attempted restart since tmnxOspfAdminState was last set to 'enabled'.
optionMismatches	long	tmnxOspfVirtNbrOptionMismatch	The value of tmnxOspfVirtNbrOptionMismatch indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.

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Table G-11 ppp statistics

5620 SAM counter name	Type	MIB counter name	Description
PppStats MIB table name: TIMETRA-PPP-MIB.tmnxPppTable Monitored class: ppp.Interface			
keepaliveEchoReplyPacketsReceived	long	tmnxPppKaInPktCount	The number of echo-reply packets received.
keepaliveEchoRequestPacketsSent	long	tmnxPppKaOutPktCount	The number of echo-request packets sent.
keepaliveThresholdExceedsCount	long	tmnxPppKaThresholdExceedsCount	The number of times that tmnxPppKaDropCount was reached.
lqmInRate	long	tmnxPppLqmInRate	The average of 'SaveInPackets'/'PeerOutPackets' in the last five consecutive LQRs received.
lqmLqrPacketsReceived	long	tmnxPppLqmInPktCount	The number of LQR packets received.
lqmLqrPacketsSent	long	tmnxPppLqmOutPktCount	The number of LQR packets sent.
lqmOutRate	long	tmnxPppLqmOutRate	The average of 'PeerInPackets'/'LastOutPackets' in the last five consecutive LQRs received.
lqmThresholdExceedsCount	long	tmnxPppLqmThresholdExceedsCount	The number of times that either tmnxPppLqmInRate or tmnxPppLqmOutRate falls below the specified quality percentage when PPP quality or LQM is enforced.

Table G-12 rsvp statistics

5620 SAM counter name	Type	MIB counter name	Description
AuthenticationKeyStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.AuthenticationKey			
errorPacketsReceived	UINT128	vRtrRsvpIfStatRxAuthErrors	The total number of RSVP packets with MD5 errors received on this RSVP interface.
errorPacketsTransmitted	UINT128	vRtrRsvpIfStatTxAuthErrors	The total number of RSVP packets with MD5 errors sent by this RSVP interface.
RsvpInterfaceReceiveStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.Interface			
acks	UINT128	vRtrRsvpIfStatRxAcks	The total number of RSVP ACK messages received when refresh reduction is enabled on this RSVP interface.
acks	UINT128	vRtrRsvpIfStatTxAcks	The total number of RSVP ACK messages that have been transmitted on this RSVP interface when refresh reduction is enabled.

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5620 SAM counter name	Type	MIB counter name	Description
bundles	UINT128	vRtrRsvpIfStatRxBundles	The total number of RSVP bundled packets received on this RSVP interface. Bundled packets are sent when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatTxBundles	The total number of RSVP bundled packets that have been transmitted on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatRxErrorPkts	The total number of RSVP packets with errors received on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatTxErrorPkts	The total number of RSVP packets with errors that have been transmitted on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatRxHelloReqs	The total number of RSVP HELLO REQ messages received on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatTxHelloReqs	The total number of RSVP HELLO REQ packets that have been transmitted on this RSVP interface.
helloTimeout	long	vRtrRsvpIfStatHelloTimeout	The total number of hello messages that timed out on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatRxPkts	The total number of error free RSVP packets received on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatTxPkts	The total number of error free RSVP packets that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatRxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatTxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted from this RSVP interface.
paths	UINT128	vRtrRsvpIfStatRxPaths	The total number of RSVP PATH messages that have been received on this RSVP interface.
paths	UINT128	vRtrRsvpIfStatTxPaths	The total number of RSVP PATH messages that have been transmitted from this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatRxPathTears	The total number of RSVP PATH TEAR messages that have been received on this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatTxPathTears	The total number of RSVP PATH TEAR messages that have been transmitted from this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatRxSRefreshes	The total number of RSVP summary refresh, SREFRESH, messages received on this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatTxSRefreshes	The total number of summary refresh, SREFRESH, messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
reserveConfirms	UINT128	vRtrRsvpIfStatRxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been received on this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
reserveConfirms	UINT128	vRtrRsvpIfStatTxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been transmitted from this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatRxResvErrors	The total number of RSVP RESV ERROR messages that have been received on this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatTxResvErrors	The total number of RSVP RESV ERROR messages that have been transmitted from this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatRxResvs	The total number of RSVP RESV messages that have been received on this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatTxResvs	The total number of RSVP RESV messages that have been transmitted from this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatRxResvTears	The total number of RSVP RESV TEAR messages that have been received on this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatTxResvTears	The total number of RSVP RESV TEAR messages that have been transmitted from this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatRxTotalPkts	The total number of RSVP packets, including errors, received on this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatTxTotalPkts	The total number of RSVP packets, including error packets, that have been transmitted on this RSVP interface.
RsvpInterfaceStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfTable Monitored class: rsvp.Interface			
activeReservations	long	vRtrRsvpIfActiveReservationCount	The total number of active RSVP sessions that have reserved bandwidth.
activeSessions	long	vRtrRsvpIfActiveSessionCount	The total number of active RSVP sessions on this interface. This count includes sessions that have requested bandwidth as well as sessions that have not requested any bandwidth.
bandwidth	long	vRtrRsvpIfBandwidth	The value of vRtrRsvpIfBandwidth specifies the amount of bandwidth in mega-bits per second (Mbps) available to be reserved for the RSVP protocol on this interface. This is typically the (port Speed * subscription Percentage).
reservedBandwidth	long	vRtrRsvpIfReservedBandwidth	The value of vRtrRsvpIfReservedBandwidth specifies the amount of bandwidth in mega-bits per second (Mbps) to reserved by the RSVP sessions on this interface. A value of zero (0) indicates that no bandwidth is reserved.

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5620 SAM counter name	Type	MIB counter name	Description
totalSessions	long	vRtrRsvpIfTotalSessionCount	The total number of RSVP sessions on this interface. This count includes sessions that are active as well as sessions that have been signalled but a response has not yet been received.
RsvpInterfaceTransmitStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.Interface			
acks	UINT128	vRtrRsvpIfStatRxAcks	The total number of RSVP ACK messages received when refresh reduction is enabled on this RSVP interface.
acks	UINT128	vRtrRsvpIfStatTxAcks	The total number of RSVP ACK messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatRxBundles	The total number of RSVP bundled packets received on this RSVP interface. Bundled packets are sent when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatTxBundles	The total number of RSVP bundled packets that have been transmitted on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatRxErrorPkts	The total number of RSVP packets with errors received on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatTxErrorPkts	The total number of RSVP packets with errors that have been transmitted on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatRxHelloReqs	The total number of RSVP HELLO REQ messages received on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatTxHelloReqs	The total number of RSVP HELLO REQ packets that have been transmitted on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatRxPkts	The total number of error free RSVP packets received on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatTxPkts	The total number of error free RSVP packets that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatRxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatTxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted from this RSVP interface.
paths	UINT128	vRtrRsvpIfStatRxPaths	The total number of RSVP PATH messages that have been received on this RSVP interface.
paths	UINT128	vRtrRsvpIfStatTxPaths	The total number of RSVP PATH messages that have been transmitted from this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatRxPathTears	The total number of RSVP PATH TEAR messages that have been received on this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
pathTears	UINT128	vRtrRsvpIfStatTxPathTears	The total number of RSVP PATH TEAR messages that have been transmitted from this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatRxSRefreshes	The total number of RSVP summary refresh, SREFRESH, messages received on this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatTxSRefreshes	The total number of summary refresh, SREFRESH, messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
reserveConfirms	UINT128	vRtrRsvpIfStatRxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been received on this RSVP interface.
reserveConfirms	UINT128	vRtrRsvpIfStatTxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been transmitted from this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatRxResvErrors	The total number of RSVP RESV ERROR messages that have been received on this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatTxResvErrors	The total number of RSVP RESV ERROR messages that have been transmitted from this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatRxResvs	The total number of RSVP RESV messages that have been received on this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatTxResvs	The total number of RSVP RESV messages that have been transmitted from this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatRxResvTears	The total number of RSVP RESV TEAR messages that have been received on this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatTxResvTears	The total number of RSVP RESV TEAR messages that have been transmitted from this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatRxTotalPkts	The total number of RSVP packets, including errors, received on this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatTxTotalPkts	The total number of RSVP packets, including error packets, that have been transmitted on this RSVP interface.
RsvpSessionStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpSessionStatTable Monitored class: rsvp.Session			
detourAge	long	vRtrRsvpSessionDetourAge	vRtrRsvpSessionDetourAge is the age (i.e., time from creation till now) of this detour LSP in 10-millisecond periods.
detourTimeUp	long	vRtrRsvpSessionDetourTimeUp	vRtrRsvpSessionDetourTimeUp is the total time in 10-millisecond units that the detour LSP has been operational.
pathsReceived	UINT128	vRtrRsvpSessionRxPaths	The total number of RSVP PATH messages received for this RSVP session.

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5620 SAM counter name	Type	MIB counter name	Description
pathsTransmitted	UINT128	vRtrRsvpSessionTxPaths	The total number of RSVP PATH messages transmitted for this RSVP session.
refreshPathsReceived	UINT128	vRtrRsvpSessionRxSrefreshPaths	The value of vRtrRsvpSessionRxSrefreshPaths indicates the number of times PATH was refreshed using message ID from full PATH refresh or Srefresh message for this RSVP session.
refreshPathsTransmitted	UINT128	vRtrRsvpSessionTxSrefreshPaths	The value of vRtrRsvpSessionTxSrefreshPaths indicates the number of times PATH refresh for the session was sent as a part of a Srefresh message.
refreshReservesReceived	UINT128	vRtrRsvpSessionRxSrefreshResvs	The value of vRtrRsvpSessionRxSrefreshResvs indicates the number of times RESV was refreshed using message ID from full RESV refresh or Srefresh message for this RSVP session.
refreshReservesTransmitted	UINT128	vRtrRsvpSessionTxSrefreshResvs	The value of vRtrRsvpSessionTxSrefreshResvs indicates the number of times RESV refresh for the session was sent as a part of a Srefresh message.
reservesReceived	UINT128	vRtrRsvpSessionRxResvs	The total number of RSVP RESV messages received for this RSVP session.
reservesTransmitted	UINT128	vRtrRsvpSessionTxResvs	The total number of RSVP RESV messages transmitted for this RSVP session.

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Table G-13 rtr statistics

5620 SAM counter name	Type	MIB counter name	Description
RouteStats MIB table name: TIMETRA-VRTR-MIB.vRtrStatTable Monitored classes: • rtr.VirtualRouter • vprn.Site			
activeARPEntries	long	vRtrStatActiveARPEntries	vRtrStatActiveARPEntries indicates the number of active ARP entries for the specified virtual router in the system.
directActiveRoutes	long	vRtrDirectActiveRoutes	vRtrDirectActiveRoutes indicates the current number of active direct routes for this instance of the route table.
directRoutes	long	vRtrDirectRoutes	vRtrDirectRoutes indicates the current number of direct routes for this instance of the route table.
illegalLabelsReceived	long	vRtrStatIllegalLabels	vRtrStatIllegalLabels indicates the number of illegally received labels on this virtual router.
isisActiveRoutes	long	vRtrISISActiveRoutes	vRtrISISActiveRoutes indicates the current number of active isis routes for this instance of the route table.

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5620 SAM counter name	Type	MIB counter name	Description
isisRoutes	long	vRtrISISRoutes	vRtrISISRoutes indicates the current number of isis routes for this instance of the route table.
ldpActiveTunnels	long	vRtrStatActiveLdpTunnels	vRtrStatActiveLdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'ldp'.
ldpTunnels	long	vRtrStatTotalLdpTunnels	vRtrStatTotalLdpTunnels indicates the current number of both active and inactive LDP tunnels.
ospfActiveRoutes	long	vRtrOSPFActiveRoutes	vRtrOSPFActiveRoutes indicates the current number of active ospf routes for this instance of the route table.
ospfRoutes	long	vRtrOSPFRoutes	vRtrOSPFRoutes indicates the current number of ospf routes for this instance of the route table.
routerInterfacesActive	long	vRtrStatActiveIfs	vRtrStatActiveIfs indicates the current number of router interfaces with vRtrIfAdminState equal 'inService' on this virtual router.
routerInterfacesConfigured	long	vRtrStatConfiguredIfs	vRtrStatConfiguredIfs indicates the current number of router interfaces configured on this virtual router.
routesInVrf	long	vRtrStatCurrNumRoutes	vRtrStatCurrNumRoutes indicates the current number of routes in the VRF for this virtual router.
sdpActiveTunnels	long	vRtrStatActiveSdpTunnels	vRtrStatActiveSdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'sdp'.
sdpTunnels	long	vRtrStatTotalSdpTunnels	vRtrStatTotalSdpTunnels indicates the current number of both active and inactive SDP tunnels.
staticActiveRoutes	long	vRtrStaticActiveRoutes	vRtrStaticActiveRoutes indicates the current number of active static routes for this instance of the route table.
staticRoutes	long	vRtrStaticRoutes	vRtrStaticRoutes indicates the current number of static routes for this instance of the route table.
totalARPEntries	long	vRtrStatTotalARPEntries	vRtrStatTotalARPEntries indicates the total number of active and inactive ARP entries for the specified virtual router in the system.

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Table G-14 service statistics

5620 SAM counter name	Type	MIB counter name	Description
CemSapStats MIB table name: TIMETRA-SAP-MIB.sapCemStatsTable Monitored class: service.L2AccessInterface			

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5620 SAM counter name	Type	MIB counter name	Description
cemStatsEgressDroppedPkts	long	sapCemStatsEgressDroppedPkts	The value of sapCemStatsEgressDroppedPkts indicates the total number of packets that were dropped due to errors.
cemStatsEgressESs	long	sapCemStatsEgressESs	The value of sapCemStatsEgressESs indicates the number of Error Seconds (ESs) encountered. Any malformed packet, seq. error, LOPS and similar are considered as error seconds.
cemStatsEgressFailureCounts	long	sapCemStatsEgressFailureCounts	The value of sapCemStatsEgressFailureCounts indicates the number failure events. A failure event begins when the LOPS failure is declared, and ends when the failure is cleared.
cemStatsEgressForwardedPkts	long	sapCemStatsEgressForwardedPkts	The value of sapCemStatsEgressForwardedPkts indicates the number of packets that were successfully forwarded.
cemStatsEgressJtrBfrDepth	long	sapCemStatsEgressJtrBfrDepth	The value of sapCemStatsEgressJtrBfrDepth indicates the current packet depth of the jitter buffer.
cemStatsEgressJtrBfrOverruns	long	sapCemStatsEgressJtrBfrOverruns	The value of sapCemStatsEgressJtrBfrOverruns indicates the number of times a packet was dropped because it could not fit in the jitter buffer.
cemStatsEgressJtrBfrUnderruns	long	sapCemStatsEgressJtrBfrUnderruns	The value of sapCemStatsEgressJtrBfrUnderruns indicates the number of times a packet needed to be played out and the jitter buffer was empty.
cemStatsEgressLBitDropped	long	sapCemStatsEgressLBitDropped	The value of sapCemStatsEgressLBitDropped indicates the number of packets dropped due to the L bit set by the far end.
cemStatsEgressMalformedPkts	long	sapCemStatsEgressMalformedPkts	The value of sapCemStatsEgressMalformedPkts indicates the number of packets detected with unexpected size, or bad headers' stack.
cemStatsEgressMisOrderDropped	long	sapCemStatsEgressMisOrderDropped	The value of sapCemStatsEgressMisOrderDropped indicates the number of packets detected out of order (via control word sequence numbers), and could not be re-ordered, or could not be placed in the jitter buffer because it was out of the current window.
cemStatsEgressMissingPkts	long	sapCemStatsEgressMissingPkts	The value of sapCemStatsEgressMissingPkts indicates the number of missing packets (as detected via control word sequence number gaps).

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5620 SAM counter name	Type	MIB counter name	Description
cemStatsEgressMultipleDropped	long	sapCemStatsEgressMultipleDropped	The value of sapCemStatsEgressMultipleDropped indicates the number of packets dropped due to multiple sequence numbers.
cemStatsEgressOverrunCounts	long	sapCemStatsEgressOverrunCounts	The value of sapCemStatsEgressOverrunCounts indicates the number of times the jitter buffer went into an overrun state.
cemStatsEgressPktsReOrder	long	sapCemStatsEgressPktsReOrder	The value of sapCemStatsEgressPktsReOrder indicates the number of packets detected out of sequence (via control word sequence number), but successfully re-ordered.
cemStatsEgressSESs	long	sapCemStatsEgressSESs	The value of sapCemStatsEgressSESs indicates the number of Severely Error Seconds (SESs) encountered. This is when more than 30 percent of the packets within a one second window are missing.
cemStatsEgressUASs	long	sapCemStatsEgressUASs	The value of sapCemStatsEgressUASs indicates the number of Unavailable Seconds (UASs) encountered. Any consecutive ten seconds of SESs are counted as one UAS.
cemStatsEgressUnderrunCounts	long	sapCemStatsEgressUnderrunCounts	The value of sapCemStatsEgressUnderrunCounts indicates the number of times the jitter buffer went into an underrun state.
cemStatsIngressDroppedPkts	long	sapCemStatsIngressDroppedPkts	The value of sapCemStatsIngressDroppedPkts indicates the total number of packets that were dropped due to errors.
cemStatsIngressForwardedPkts	long	sapCemStatsIngressForwardedPkts	The value of sapCemStatsIngressForwardedPkts indicates the number of packets that were successfully forwarded.

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Table G-15 sitesec statistics

5620 SAM counter name	Type	MIB counter name	Description
CpmIpFilterStats MIB table name: TIMETRA-SECURITY-MIB.tCpmIpFilterStatsTable Monitored class: sitesec.CpmIpFilterEntry			
droppedPackets	UINT128	tCpmIpFilterStatsDroppedPkts	The value of tCpmIpFilterStatsDroppedPkts indicates the number of packets dropped due to the tCpmIpFilterEntry with the same index.
forwardedPackets	UINT128	tCpmIpFilterStatsForwardedPkts	The value of tCpmIpFilterStatsForwardedPkts indicates the number of packets forwarded due to the tCpmIpFilterEntry with the same index.

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5620 SAM counter name	Type	MIB counter name	Description
MafEntryStats MIB table name: TIMETRA-SECURITY-MIB.tmnxIPMafMatchTable Monitored class: sitesec.MafEntry			
matchCount	UINT128	tmnxIPMafMatchCount	The value of tmnxIPMafMatchCount indicates the number of times a management packet has matched this filter entry.

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Table G-16 sonetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
SonetFarEndLineCurrentStats MIB table name: SONET-MIB.sonetFarEndLineCurrentTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetFarEndLineCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
erroredSeconds	long	sonetFarEndLineCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
severelyErroredSeconds	long	sonetFarEndLineCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
unavailableSeconds	long	sonetFarEndLineCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
SonetFarEndLineIntervalStats MIB table name: SONET-MIB.sonetFarEndLineIntervalTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetFarEndLineIntervalCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetFarEndLineIntervalESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.

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5620 SAM counter name	Type	MIB counter name	Description
intervalNumber	int	sonetFarEndLineIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetFarEndLineIntervalSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetFarEndLineIntervalUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
SonetFarEndPathCurrentStats MIB table name: SONET-MIB.sonetFarEndPathCurrentTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
erroredSeconds	long	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
severelyErroredSeconds	long	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
unavailableSeconds	long	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.

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5620 SAM counter name	Type	MIB counter name	Description
SonetFarEndPathIntervalStats MIB table name: SONET-MIB.sonetFarEndPathIntervalTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetFarEndPathIntervalCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetFarEndPathIntervalESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetFarEndPathIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetFarEndPathIntervalSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetFarEndPathIntervalUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
SonetFarEndVtCurrentStats MIB table name: SONET-MIB.sonetFarEndVTCurrentTable Monitored class: sonetequipment.TributaryChannel			
codingViolations	long	sonetFarEndVTCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH VT interface in the current 15 minute interval.
erroredSeconds	long	sonetFarEndVTCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
severelyErroredSeconds	long	sonetFarEndVTCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH VT interface in the current 15 minute interval.

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5620 SAM counter name	Type	MIB counter name	Description
unavailableSeconds	long	sonetFarEndVTCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH VT interface in the current 15 minute interval.
SonetFarEndVtIntervalStats MIB table name: SONET-MIB.sonetFarEndVTIntervalTable Monitored class: sonetequipment.TributaryChannel			
codingViolations	long	sonetFarEndVTIntervalCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetFarEndVTIntervalESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetFarEndVTIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetFarEndVTIntervalSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetFarEndVTIntervalUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.
SonetLineCurrentStats MIB table name: SONET-MIB.sonetLineCurrentTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetLineCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in the current 15 minute interval.
currentStatus	long	sonetLineCurrentStatus	This variable indicates the status of the interface. The sonetLineCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetLineNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetLineNoDefect 2 sonetLineAIS 4 sonetLineRDI.

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5620 SAM counter name	Type	MIB counter name	Description
erroredSeconds	long	sonetLineCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
severelyErroredSeconds	long	sonetLineCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
unavailableSeconds	long	sonetLineCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
SonetLineIntervalStats MIB table name: SONET-MIB.sonetLineIntervalTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetLineIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetLineIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetLineIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetLineIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetLineIntervalUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
SonetPathCurrentStats MIB table name: SONET-MIB.sonetPathCurrentTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.

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5620 SAM counter name	Type	MIB counter name	Description
currentStatus	long	sonetPathCurrentStatus	This variable indicates the status of the interface. The sonetPathCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetPathNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetPathNoDefect 2 sonetPathSTSLOP 4 sonetPathSTSAIS 8 sonetPathSTSRDI 16 sonetPathUnequipped 32 sonetPathSignalLabelMismatch.
currentWidth	int	sonetPathCurrentWidth	A value that indicates the type of the SONET/SDH Path. For SONET, the assigned types are the STS-Nc SPEs, where N = 1, 3, 12, 24, 48, 192 and 768. STS-1 is equal to 51.84 Mbps. For SDH, the assigned types are the STM-Nc VCs, where N = 1, 4, 16, 64 and 256.
erroredSeconds	long	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
severelyErroredSeconds	long	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
unavailableSeconds	long	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.
SonetPathIntervalStats MIB table name: SONET-MIB.sonetPathIntervalTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetPathIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetPathIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetPathIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.

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5620 SAM counter name	Type	MIB counter name	Description
severelyErroredSeconds	long	sonetPathIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetPathIntervalUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in a particular 15-minute interval in the past 24 hours.
SonetSectionCurrentStats MIB table name: SONET-MIB.sonetSectionCurrentTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetSectionCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in the current 15 minute interval.
currentStatus	long	sonetSectionCurrentStatus	This variable indicates the status of the interface. The sonetSectionCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetSectionNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetSectionNoDefect 2 sonetSectionLOS 4 sonetSectionLOF.
erroredSeconds	long	sonetSectionCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
severelyErroredFramingSeconds	long	sonetSectionCurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
severelyErroredSeconds	long	sonetSectionCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
SonetSectionIntervalStats MIB table name: SONET-MIB.sonetSectionIntervalTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetSectionIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetSectionIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetSectionIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.

5620 SAM counter name	Type	MIB counter name	Description
severelyErroredFramingSeconds	long	sonetSectionIntervalSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
severelyErroredSeconds	long	sonetSectionIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
SonetVtCurrentStats MIB table name: SONET-MIB.sonetVTCurrentTable Monitored class: sonetequipment.TributaryChannel			
codingViolations	long	sonetVTCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH VT in the current 15 minute interval.
currentStatus	long	sonetVTCurrentStatus	This variable indicates the status of the interface. The sonetVTCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects and failures simultaneously. The sonetVTNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetVTNoDefect 2 sonetVTLOP 4 sonetVTPathAIS 8 sonetVTPathRDI 16 sonetVTPathRFI 32 sonetVTUnequipped 64 sonetVTSignalLabelMismatch.
currentWidth	int	sonetVTCurrentWidth	A value that indicates the type of the SONET VT and SDH VC. Assigned widths are VT1.5/VC11, VT2/VC12, VT3, VT6/VC2, and VT6c.
erroredSeconds	long	sonetVTCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH VT in the current 15 minute interval.
severelyErroredSeconds	long	sonetVTCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH VT in the current 15 minute interval.
unavailableSeconds	long	sonetVTCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a VT in the current 15 minute interval.
SonetVtIntervalStats MIB table name: SONET-MIB.sonetVTIntervalTable Monitored class: sonetequipment.TributaryChannel			
codingViolations	long	sonetVTIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH VT in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetVTIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH VT in a particular 15-minute interval in the past 24 hours.

5620 SAM counter name	Type	MIB counter name	Description
intervalNumber	int	sonetVTIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetVTIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH VT in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetVTIntervalUASs	The counter associated with the number of Unavailable Seconds encountered by a VT in a particular 15-minute interval in the past 24 hours.

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Table G-17 svt statistics

5620 SAM counter name	Type	MIB counter name	Description
SdpBindingBaseStats MIB table name: TIMETRA-SDP-MIB.sdpBindBaseStatsTable Monitored classes: • svt.SpokeSdpBinding • svt.MeshSdpBinding			
egressForwardedOctets	UINT128	sdpBindBaseStatsEgressForwardedOctets	.
egressForwardedPackets	UINT128	sdpBindBaseStatsEgressForwardedPackets	.
ingressDroppedOctets	UINT128	sdpBindBaseStatsIngDropOctets	.
ingressDroppedPackets	UINT128	sdpBindBaseStatsIngressDroppedPackets	.
ingressForwardedOctets	UINT128	sdpBindBaseStatsIngFwdOctets	.
ingressForwardedPackets	UINT128	sdpBindBaseStatsIngressForwardedPackets	.
TunnelKeepAliveStats MIB table name: TIMETRA-SDP-MIB.sdpInfoTable Monitored class: svt.Tunnel			
lateHelloResponses	long	sdpKeepAliveNumLateHelloResponseMessages	The number of SDP Echo Response messages received after the corresponding Request timeout timer expired.
receivedHelloMessages	long	sdpKeepAliveNumHelloResponseMessages	The number of SDP Echo Response messages received since the keep-alive was administratively enabled or the counter was cleared.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedHelloMessages	long	sdpKeepAliveNumHelloRequestMessages	The number of SDP Echo Request messages transmitted since the keep-alive was administratively enabled or the counter was cleared.

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Table G-18 tdmequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AdaptiveClockRecoveryStats MIB table name: ALU-PORT-MIB.aluPortAcrClkStatsTable Monitored class: tdmequipment.DS1E1Channel			
freqOffsetMeanPastDay	long	aluCurrent24HourFreqOffsetMeanPpb	aluCurrent24HourFreqOffsetMeanPpb indicates the mean frequency offset from the local oscillator clock in parts per billion for up to the last 24 hour.
freqOffsetMeanPastMinute	long	aluCurrent1MinFreqOffsetMeanPpb	The mean frequency offset from the local oscillator clock in parts per billion during the first interval.
freqOffsetStdDevPastDay	long	aluCurrent24HourFreqOffsetStdDevPpb	aluCurrent24HourFreqOffsetStdDevPpb indicates the standard deviation of the frequency offset from the local oscillator clock in parts per billion for up to the last 24 hour.
freqOffsetStdDevPastMinute	long	aluCurrent1MinFreqOffsetStdDevPpb	The standard deviation of the frequency offset from the local oscillator clock in nano seconds during the first interval.
phaseErrorMeanPastMinuteTime	long	aluCurrent1MinPhaseErrorMeanNs	The mean of the phase error from the local oscillator clock in nano seconds during the first interval.
phaseErrorStdDevPastMinute	long	aluCurrent1MinPhaseErrorStdDevNs	The standard deviation of the phase error from the local oscillator clock in nano seconds during the first interval.
DS1CurrentStats MIB table name: DS1-MIB.dsx1CurrentTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1CurrentBESs	The number of Bursty Errored Seconds.
controlledSlipSeconds	long	dsx1CurrentCSSs	The number of Controlled Slip Seconds.
degradedMinutes	long	dsx1CurrentDMs	The number of Degraded Minutes.
erroredSeconds	long	dsx1CurrentESs	The number of Errored Seconds.
lineCodingViolations	long	dsx1CurrentLCVs	The number of Line Code Violations (LCVs).
lineErroredSeconds	long	dsx1CurrentLESs	The number of Line Errored Seconds.
pBitCodingViolations	long	dsx1CurrentPCVs	The number of Path Coding Violations.
severelyErroredFramingSeconds	long	dsx1CurrentSEFSs	The number of Severely Errored Framing Seconds.
severelyErroredSeconds	long	dsx1CurrentSESs	The number of Severely Errored Seconds.

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5620 SAM counter name	Type	MIB counter name	Description
unavailableSeconds	long	dsx1CurrentUASs	The number of Unavailable Seconds.
DS1IntervalStats MIB table name: DS1-MIB.dsx1IntervalTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1IntervalBESs	The number of Bursty Errored Seconds.
controlledSlipSeconds	long	dsx1IntervalCSSs	The number of Controlled Slip Seconds.
degradedMinutes	long	dsx1IntervalDMs	The number of Degraded Minutes.
erroredSeconds	long	dsx1IntervalESs	The number of Errored Seconds.
intervalNumber	int	dsx1IntervalNumber	A number between 1 and 96, where 1 is the most recently completed 15 minute interval and 96 is the 15 minutes interval completed 23 hours and 45 minutes prior to interval 1.
lineCodingViolations	long	dsx1IntervalLCVs	The number of Line Code Violations.
lineErroredSeconds	long	dsx1IntervalLESs	The number of Line Errored Seconds.
pBitCodingViolations	long	dsx1IntervalPCVs	The number of Path Coding Violations.
severelyErroredFramingSeconds	long	dsx1IntervalSEFSs	The number of Severely Errored Framing Seconds.
severelyErroredSeconds	long	dsx1IntervalSESs	The number of Severely Errored Seconds.
unavailableSeconds	long	dsx1IntervalUASs	The number of Unavailable Seconds. This object may decrease if the occurrence of unavailable seconds occurs across an interval boundary.
DS1TotalStats MIB table name: DS1-MIB.dsx1TotalTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1TotalBESs	The number of Bursty Errored Seconds (BESs) encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
controlledSlipSeconds	long	dsx1TotalCSSs	The number of Controlled Slip Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
degradedMinutes	long	dsx1TotalDMs	The number of Degraded Minutes (DMs) encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
erroredSeconds	long	dsx1TotalESs	The sum of Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
lineCodingViolations	long	dsx1TotalLCVs	The number of Line Code Violations (LCVs) encountered by a DS1 interface in the current 15 minute interval. Invalid 15 minute intervals count as 0.

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5620 SAM counter name	Type	MIB counter name	Description
lineErroredSeconds	long	dsx1TotalLESs	The number of Line Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pBitCodingViolations	long	dsx1TotalPCVs	The number of Path Coding Violations encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredFramingSeconds	long	dsx1TotalSEFSs	The number of Severely Errored Framing Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredSeconds	long	dsx1TotalSESs	The number of Severely Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
unavailableSeconds	long	dsx1TotalUASs	The number of Unavailable Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
DS3CurrentStats MIB table name: DS3-MIB.dsx3CurrentTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3CurrentCCVs	The number of C-bit Coding Violations.
cBitErroredSeconds	long	dsx3CurrentCESs	The number of C-bit Errored Seconds.
cBitSeverelyErroredSeconds	long	dsx3CurrentCSESs	The number of C-bit Severely Errored Seconds.
lineCodingViolations	long	dsx3CurrentLCVs	The counter associated with the number of Line Coding Violations.
lineErroredSeconds	long	dsx3CurrentLESs	The number of Line Errored Seconds.
pBitCodingViolations	long	dsx3CurrentPCVs	The counter associated with the number of P-bit Coding Violations.
pBitErroredSeconds	long	dsx3CurrentPESs	The counter associated with the number of P-bit Errored Seconds.
pBitSeverelyErroredSeconds	long	dsx3CurrentPSESs	The counter associated with the number of P-bit Severely Errored Seconds.
severelyErroredFramingSeconds	long	dsx3CurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds.
unavailableSeconds	long	dsx3CurrentUASs	The counter associated with the number of Unavailable Seconds.
DS3FarEndCurrentStats MIB table name: DS3-MIB.dsx3FarEndCurrentTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3FarEndCurrentCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count.
cBitErroredSeconds	long	dsx3FarEndCurrentCESs	The counter associated with the number of Far End C-bit Errored Seconds.

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5620 SAM counter name	Type	MIB counter name	Description
cBitSeverelyErroredSeconds	long	dsx3FarEndCurrentCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds.
invalidIntervals	int	dsx3FarEndInvalidIntervals	The number of intervals in the range from 0 to dsx3FarEndValidIntervals for which no data is available. This object will typically be zero except in cases where the data for some intervals are not available (e.g., in proxy situations).
timeElapsed	int	dsx3FarEndTimeElapsed	The number of seconds that have elapsed since the beginning of the far end current error-measurement period. If, for some reason, such as an adjustment in the system's time-of-day clock, the current interval exceeds the maximum value, the agent will return the maximum value.
unavailableSeconds	long	dsx3FarEndCurrentUASs	The counter associated with the number of Far End unavailable seconds.
validIntervals	int	dsx3FarEndValidIntervals	The number of previous far end intervals for which data was collected. The value will be 96 unless the interface was brought online within the last 24 hours, in which case the value will be the number of complete 15 minute far end intervals since the interface has been online. In the case where the agent is a proxy, it is possible that some intervals are unavailable. In this case, this interval is the maximum interval number for which data is available.
DS3FarEndIntervalStats MIB table name: DS3-MIB.dsx3FarEndIntervalTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3FarEndIntervalCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count.
cBitErroredSeconds	long	dsx3FarEndIntervalCESs	The counter associated with the number of Far End C-bit Errored Seconds encountered by a DS3 interface in one of the previous 96, individual 15 minute, intervals. In the case where the agent is a proxy and data is not available, return noSuchInstance.
cBitSeverelyErroredSeconds	long	dsx3FarEndIntervalCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds.
intervalNumber	int	dsx3FarEndIntervalNumber	A number between 1 and 96, where 1 is the most recently completed 15 minute interval and 96 is the 15 minutes interval completed 23 hours and 45 minutes prior to interval 1.
unavailableSeconds	long	dsx3FarEndIntervalUASs	The counter associated with the number of Far End unavailable seconds.
DS3FarEndTotalStats MIB table name: DS3-MIB.dsx3FarEndTotalTable Monitored class: tdmequipment.DS3E3Channel			

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5620 SAM counter name	Type	MIB counter name	Description
cBitCodingViolations	long	dsx3FarEndTotalCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
cBitErroredSeconds	long	dsx3FarEndTotalCESs	The counter associated with the number of Far End C-bit Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
cBitSeverelyErroredSeconds	long	dsx3FarEndTotalCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
unavailableSeconds	long	dsx3FarEndTotalUASs	The counter associated with the number of Far End unavailable seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
DS3IntervalStats MIB table name: DS3-MIB.dsx3IntervalTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3IntervalCCVs	The number of C-bit Coding Violations.
cBitErroredSeconds	long	dsx3IntervalCESs	The number of C-bit Errored Seconds.
cBitSeverelyErroredSeconds	long	dsx3IntervalCSESs	The number of C-bit Severely Errored Seconds.
intervalNumber	int	dsx3IntervalNumber	A number between 1 and 96, where 1 is the most recently completed 15 minute interval and 96 is the 15 minutes interval completed 23 hours and 45 minutes prior to interval 1.
lineCodingViolations	long	dsx3IntervalLCVs	The counter associated with the number of Line Coding Violations.
lineErroredSeconds	long	dsx3IntervalLESs	The number of Line Errored Seconds (BPVs or illegal zero sequences).
pBitCodingViolations	long	dsx3IntervalPCVs	The counter associated with the number of P-bit Coding Violations.
pBitErroredSeconds	long	dsx3IntervalPESs	The counter associated with the number of P-bit Errored Seconds.
pBitSeverelyErroredSeconds	long	dsx3IntervalPSESs	The counter associated with the number of P-bit Severely Errored Seconds.
severelyErroredFramingSeconds	long	dsx3IntervalSEFSs	The counter associated with the number of Severely Errored Framing Seconds.
unavailableSeconds	long	dsx3IntervalUASs	The counter associated with the number of Unavailable Seconds. This object may decrease if the occurrence of unavailable seconds occurs across an interval boundary.

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5620 SAM counter name	Type	MIB counter name	Description
DS3TotalStats MIB table name: DS3-MIB.dsx3TotalTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3TotalCCVs	The number of C-bit Coding Violations encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
cBitErroredSeconds	long	dsx3TotalCESs	The number of C-bit Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
cBitSeverelyErroredSeconds	long	dsx3TotalCSESs	The number of C-bit Severely Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
lineCodingViolations	long	dsx3TotalLCVs	The counter associated with the number of Line Coding Violations encountered by a DS3/E3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
lineErroredSeconds	long	dsx3TotalLESs	The number of Line Errored Seconds (BPVs or illegal zero sequences) encountered by a DS3/E3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pBitCodingViolations	long	dsx3TotalPCVs	The counter associated with the number of P-bit Coding Violations, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pBitErroredSeconds	long	dsx3TotalPESs	The counter associated with the number of P-bit Errored Seconds, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pBitSeverelyErroredSeconds	long	dsx3TotalPSESs	The counter associated with the number of P-bit Severely Errored Seconds, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredFramingSeconds	long	dsx3TotalSEFSs	The counter associated with the number of Severely Errored Framing Seconds, encountered by a DS3/E3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
unavailableSeconds	long	dsx3TotalUASs	The counter associated with the number of Unavailable Seconds, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.

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H. 7710 SR Release 7.0 statistics counters

H.1 7710 SR Release 7.0 statistics counters H-2

H.1 7710 SR Release 7.0 statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for the 7710 SR, Release 7.0. Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.



Note 1 — The tables list the 5620 SAM-supported statistics counters for the current release of the device. Counters that are supported for a previous device release, but not for the current release, are not listed.

Note 2 — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table H-1 lists each statistics package and the associated statistics-counter table.

Table H-1 Statistics packages and counter tables

Package name	See
aclfilter	Table H-2
aps	Table H-3
atm	Table H-4
bgp	Table H-5
bundle	Table H-6
dhcp	Table H-7
equipment	Table H-8
ethernetequipment	Table H-9
fr	Table H-10
gsmp	Table H-11
igmp	Table H-12
isis	Table H-13
l2fib	Table H-14
l2fwd	Table H-15
lag	Table H-16
ldp	Table H-17
lldp	Table H-18

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Package name	See
mld	Table H-19
mpls	Table H-20
msdp	Table H-21
multicast	Table H-22
multichassis	Table H-23
ospf	Table H-24
pae802_1x	Table H-25
pim	Table H-26
ppp	Table H-27
radiusaccounting	Table H-28
ressubscr	Table H-29
rip	Table H-30
rsvp	Table H-31
rtr	Table H-32
service	Table H-33
sitesec	Table H-34
sonetequipment	Table H-35
srrp	Table H-36
subscrauth	Table H-37
svq	Table H-38
svt	Table H-39
tdmequipment	Table H-40
vpls	Table H-41
vrrp	Table H-42

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Table H-2 aclfilter statistics

5620 SAM counter name	Type	MIB counter name	Description
HitCountStats MIB table name: TIMETRA-FILTER-MIB.tIPFilterParamsTable Monitored class: aclfilter.IpFilterEntry			
egressHitByteCount	UINT128	tIPFilterParamsEgrHitByteCount	The value of tIPFilterParamsEgrHitByteCount indicates the number of bytes of all egress packets that matched this entry.
egressHitCount	UINT128	tIPFilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.

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5620 SAM counter name	Type	MIB counter name	Description
ingressHitByteCount	UINT128	tIPFilterParamsIngrHitByteCount	The value of tIPFilterParamsIngrHitByteCount indicates the number of bytes of all ingress packets that matched this entry.
ingressHitCount	UINT128	tIPFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.
Ipv6HitCountStats MIB table name: TIMETRA-FILTER-MIB.tIPv6FilterParamsTable Monitored class: aclfilter.Ipv6FilterEntry			
egressHitByteCount	UINT128	tIPv6FilterParamsEgrHitByteCount	This tIPv6FilterParamsEgrHitByteCount indicates the number of bytes of all egress packets that matched this entry.
egressHitCount	UINT128	tIPv6FilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitByteCount	UINT128	tIPv6FilterParamsIngrHitByteCount	The value of tIPv6FilterParamsIngrHitByteCount indicates the number of bytes of all ingress packets that matched this entry.
ingressHitCount	UINT128	tIPv6FilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.
MacHitCountStats MIB table name: TIMETRA-FILTER-MIB.tMacFilterParamsTable Monitored class: aclfilter.MacFilterEntry			
egressHitByteCount	UINT128	tMacFilterParamsEgrHitByteCount	The value of tMacFilterParamsEgrHitByteCount indicates the number of bytes of all egress packets that matched this entry.
egressHitCount	UINT128	tMacFilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitByteCount	UINT128	tMacFilterParamsIngrHitByteCount	The value of tMacFilterParamsIngrHitByteCount indicates the number of bytes of all ingress packets that matched this entry.
ingressHitCount	UINT128	tMacFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.

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Table H-3 aps statistics

5620 SAM counter name	Type	MIB counter name	Description
ApsChannelStats MIB table name: APS-MIB.apsChanStatusTable Monitored class: aps.ApsChannel			

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5620 SAM counter name	Type	MIB counter name	Description
discontinuityTime	long	apsChanStatusDiscontinuityTime	The value of sysUpTime on the most recent occasion at which any one or more of this channel's counters suffered a discontinuity. The relevant counters are the specific instances associated with this channel of any Counter32 object contained in apsChanStatusTable. If no such discontinuities have occurred since the last re-initialization of the local management subsystem, then this object contains a zero value.
lastSwitchover	long	apsChanStatusLastSwitchover	When queried with index value apsChanConfigNumber other than 0, this object will return the value of sysUpTime when this channel last completed a switch to the protection line. If this channel has never switched to the protection line, the value 0 will be returned. When queried with index value apsChanConfigNumber set to 0, which is the protection line, this object will return the value of sysUpTime the last time that a working channel was switched back to the working line from this protection line. If no working channel has ever switched back to the working line from this protection line, the value 0 will be returned.
signalDegrades	long	apsChanStatusSignalDegrades	A count of Signal Degrade conditions. This condition occurs when the line Bit Error Rate exceeds the currently configured value of the relevant instance of apsConfigSdBerThreshold. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime.
signalFailures	long	apsChanStatusSignalFailures	A count of Signal Failure conditions that have been detected on the incoming signal. This condition occurs when a loss of signal, loss of frame, AIS-L or a Line bit error rate exceeding the currently configured value of the relevant instance of apsConfigSfBerThreshold. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
switchovers	long	apsChanStatusSwitchovers	When queried with index value apsChanConfigNumber other than 0, this object will return the number of times this channel has switched to the protection line. When queried with index value apsChanConfigNumber set to 0, which is the protection line, this object will return the number of times that any working channel has been switched back to the working line from this protection line. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime.
switchoverSeconds	long	apsChanStatusSwitchoverSeconds	The cumulative Protection Switching Duration (PSD) time in seconds. For a working channel, this is the cumulative number of seconds that service was carried on the protection line. For the protection line, this is the cumulative number of seconds that the protection line has been used to carry any working channel traffic. This information is only valid if revertive switching is enabled. The value 0 will be returned otherwise. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime. For example, if the value of an instance of apsChanStatusSwitchoverSeconds changes from a non-zero value to zero due to revertive switching being disabled, it is expected that the corresponding value of apsChanStatusDiscontinuityTime will be updated to reflect the time of the configuration change.
ApsGroupStats MIB table name: APS-MIB.apsStatusTable Monitored class: aps.ApsGroup			
channelMismatches	long	apsStatusChannelMismatches	A count of Channel Mismatch conditions. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.
discontinuityTime	long	apsStatusDiscontinuityTime	The value of sysUpTime on the most recent occasion at which any one or more of this APS group's counters suffered a discontinuity. The relevant counters are the specific instances associated with this APS group of any Counter32 object contained in apsStatusTable. If no such discontinuities have occurred since the last re-initialization of the local management subsystem, then this object contains a zero value.

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5620 SAM counter name	Type	MIB counter name	Description
fEPLFs	long	apsStatusFEPLFs	A count of Far-End Protection-Line Failure conditions. This condition is declared based on receiving SF on the protection line in the K1 byte. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.
modeMismatches	long	apsStatusModeMismatches	A count of Mode Mismatch conditions. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.
pSBFs	long	apsStatusPSBFs	A count of Protection Switch Byte Failure conditions. This condition occurs when either an inconsistent APS byte or an invalid code is detected. An inconsistent APS byte occurs when no three consecutive K1 bytes of the last 12 successive frames are identical, starting with the last frame containing a previously consistent byte. An invalid code occurs when the incoming K1 byte contains an unused code or a code irrelevant for the specific switching operation (e.g., Reverse Request while no switching request is outstanding) in three consecutive frames. An invalid code also occurs when the incoming K1 byte contains an invalid channel number in three consecutive frames. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.

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Table H-4 atm statistics

5620 SAM counter name	Type	MIB counter name	Description
AtmIfcStatistics MIB table name: TIMETRA-ATM-MIB.tAtmIfcStatisticsTable Monitored class: atm.IfConnection			
tAtmIfcStatsDrpCellsRxd	long	tAtmIfcStatsDrpCellsRxd	The value of tAtmIfcStatsDrpCellsRxd indicates the number of all policer cells discards (CLP=0+1) of the IFC. This excludes any buffer management discards (if applicable).
tAtmIfcStatsDrpClp0CellsRxd	long	tAtmIfcStatsDrpClp0CellsRxd	The value of tAtmIfcStatsDrpClp0CellsRxd indicates the number of all policer CLP=0 cells discards of the IFC. This excludes any buffer management discards (if applicable).

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5620 SAM counter name	Type	MIB counter name	Description
tAtmIfcStatsDrpClp0CellsTxd	long	tAtmIfcStatsDrpClp0CellsTxd	The value of tAtmIfcStatsDrpClp0CellsTxd indicates the number of all CLP=0 cells discards of this IFC. This includes both discards due to buffer management and policer.
tAtmIfcStatsTagCells	long	tAtmIfcStatsTagCells	The value of tAtmIfcStatsTagCells indicates the number of tagged CLP=0 cells of the IFC. The egress may or may not discard these cells.
tAtmIfcStatsTotalBytesRxd	UINT128	tAtmIfcStatsTotalBytesTxd	The value of tAtmIfcStatsTotalBytesTxd indicates the number of bytes transmitted by this IFC. This is the number of tAtmIfcStatsTotalCellsTxd multiplied by 53.
tAtmIfcStatsTotalBytesTxd	UINT128	tAtmIfcStatsTotalBytesRxd	The value of tAtmIfcStatsTotalBytesRxd indicates the number of bytes received by this IFC. This is the number of tAtmIfcStatsTotalCellsRxd multiplied by 53.
tAtmIfcStatsTotalCellsRxd	UINT128	tAtmIfcStatsTotalCellsRxd	The value of tAtmIfcStatsTotalCellsRxd indicates the number of valid ATM cells received by the IFC including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmIfcStatsTotalCellsTxd	UINT128	tAtmIfcStatsTotalCellsTxd	The value of tAtmIfcStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the IFC including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmIfcStatsTotalClp0CellsRxd	UINT128	tAtmIfcStatsTotalClp0CellsRxd	The value of tAtmIfcStatsTotalClp0CellsRxd indicates the number of valid ATM CLP=0 cells received by the IFC. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmIfcStatsTotalClp0CellsTxd	UINT128	tAtmIfcStatsTotalClp0CellsTxd	The value of tAtmIfcStatsTotalClp0CellsTxd indicates the number of valid ATM CLP=0 cells transmitted by the IFC. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
AtmOamVplStatistics MIB table name: TIMETRA-ATM-MIB.tAtmOamVplStatisticsTable Monitored class: atm.VPConnection			
tAtmOamVplStatsAISCellsRxd	long	tAtmOamVplStatsAISCellsRxd	The value of tAtmOamVplStatsAISCellsRxd indicates the number of AIS cells received on this VPL for both end to end and segment.
tAtmOamVplStatsAISCellsTxd	long	tAtmOamVplStatsAISCellsTxd	The value of tAtmOamVplStatsAISCellsTxd indicates the number of AIS cells transmitted on this VPL for both end to end and segment.

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5620 SAM counter name	Type	MIB counter name	Description
tAtmOamVplStatsCrc10Errors	long	tAtmOamVplStatsCrc10Errors	The value of tAtmOamVplStatsCrc10Errors indicates the number of OAM cells discarded on this VPL with CRC 10 errors.
tAtmOamVplStatsLoopbackCellsRxd	long	tAtmOamVplStatsLoopbackCellsRxd	The value of tAtmOamVplStatsLoopbackCellsRxd indicates the number of loopback requests and responses received on this VPL for both end to end and segment.
tAtmOamVplStatsLoopbackCellsTxd	long	tAtmOamVplStatsLoopbackCellsTxd	The value of tAtmOamVplStatsLoopbackCellsTxd indicates the number of loopback requests and responses transmitted on this VPL for both end to end and segment.
tAtmOamVplStatsOtherCellsRxd	long	tAtmOamVplStatsOtherCellsRxd	This value of tAtmOamVplStatsOtherCellsRxd indicates the number of OAM cells that are received on this VPL but not identified.
tAtmOamVplStatsRDICellsRxd	long	tAtmOamVplStatsRDICellsRxd	The value of tAtmOamVplStatsRDICellsRxd indicates the number of RDI cells received on this VPL for both end to end and segment.
tAtmOamVplStatsRDICellsTxd	long	tAtmOamVplStatsRDICellsTxd	The value of tAtmOamVplStatsRDICellsTxd indicates the number of RDI cells transmitted on this VPL for both end to end and segment.
AtmVplStatistics MIB table name: TIMETRA-ATM-MIB.tAtmVplStatisticsTable Monitored class: atm.VPConnection			
tAtmVplStatsDrpCellsRxd	long	tAtmVplStatsDrpCellsRxd	The value of tAtmVplStatsDrpCellsRxd indicates the number of all policer cells discards (CLP=0+1) of the VPL. This excludes any buffer management discards (if applicable).
tAtmVplStatsDrpClp0CellsRxd	long	tAtmVplStatsDrpClp0CellsRxd	The value of tAtmVplStatsDrpClp0CellsRxd indicates the number of all policer CLP=0 cells discards of the VPL. This excludes any buffer management discards (if applicable).
tAtmVplStatsDrpClp0CellsTxd	long	tAtmVplStatsDrpClp0CellsTxd	The value of tAtmVplStatsDrpClp0CellsTxd indicates the number of all CLP=0 cells discards of this VPL. This includes both discards due to buffer management and policer.
tAtmVplStatsTagCells	long	tAtmVplStatsTagCells	The value of tAtmVplStatsTagCells indicates the number of tagged CLP=0 cells of the VPL. The egress may or may not discard these cells.
tAtmVplStatsTotalBytesRxd	UINT128	tAtmVplStatsTotalBytesRxd	The value of tAtmVplStatsTotalBytesRxd indicates the number of bytes received by this VPL. This is the number of tAtmVplStatsTotalCellsRxd multiplied by 53.

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5620 SAM counter name	Type	MIB counter name	Description
tAtmVplStatsTotalBytesTxd	UINT128	tAtmVplStatsTotalBytesTxd	The value of tAtmVplStatsTotalBytesTxd indicates the number of bytes transmitted by this VPL. This is the number of tAtmVplStatsTotalCellsTxd multiplied by 53.
tAtmVplStatsTotalCellsRxd	UINT128	tAtmVplStatsTotalCellsRxd	The value of tAtmVplStatsTotalCellsRxd indicates the number of valid ATM cells received by the VPL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVplStatsTotalCellsTxd	UINT128	tAtmVplStatsTotalCellsTxd	The value of tAtmVplStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the VPL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVplStatsTotalClp0CellsRxd	UINT128	tAtmVplStatsTotalClp0CellsRxd	The value of tAtmVplStatsTotalClp0CellsRxd indicates the number of valid ATM CLP=0 cells received by the VPL. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVplStatsTotalClp0CellsTxd	UINT128	tAtmVplStatsTotalClp0CellsTxd	The value of tAtmVplStatsTotalClp0CellsTxd indicates the number of valid ATM CLP=0 cells transmitted by the VPL. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
AtmVtlStatistics MIB table name: TIMETRA-ATM-MIB.tAtmVtlStatisticsTable Monitored class: atm.VTConnection			
tAtmVtlStatsDrpCellsRxd	long	tAtmVtlStatsDrpCellsRxd	The value of tAtmVtlStatsDrpCellsRxd indicates the number of all policer cells discards (CLP=0+1) of the VTL. This excludes any buffer management discards (if applicable).
tAtmVtlStatsDrpClp0CellsRxd	long	tAtmVtlStatsDrpClp0CellsRxd	The value of tAtmVtlStatsDrpClp0CellsRxd indicates the number of all policer CLP=0 cells discards of the VTL. This excludes any buffer management discards (if applicable).
tAtmVtlStatsDrpClp0CellsTxd	long	tAtmVtlStatsDrpClp0CellsTxd	The value of tAtmVtlStatsDrpClp0CellsTxd indicates the number of all CLP=0 cells discards of this VTL. This includes both discards due to buffer management and policer.
tAtmVtlStatsTagCells	long	tAtmVtlStatsTagCells	The value of tAtmVtlStatsTagCells indicates the number of tagged CLP=0 cells of the VTL. The egress may or may not discard these cells.
tAtmVtlStatsTotalBytesRxd	UINT128	tAtmVtlStatsTotalBytesTxd	The value of tAtmVtlStatsTotalBytesTxd indicates the number of bytes transmitted by this VTL. This is the number of tAtmVtlStatsTotalCellsTxd multiplied by 53.

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5620 SAM counter name	Type	MIB counter name	Description
tAtmVtlStatsTotalBytesTxd	UINT128	tAtmVtlStatsTotalBytesRxd	The value of tAtmVtlStatsTotalBytesRxd indicates the number of bytes received by this VTL. This is the number of tAtmVtlStatsTotalCellsRxd multiplied by 53.
tAtmVtlStatsTotalCellsRxd	UINT128	tAtmVtlStatsTotalCellsRxd	The value of tAtmVtlStatsTotalCellsRxd indicates the number of valid ATM cells received by the VTL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVtlStatsTotalCellsTxd	UINT128	tAtmVtlStatsTotalCellsTxd	The value of tAtmVtlStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the VTL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVtlStatsTotalClp0CellsRxd	UINT128	tAtmVtlStatsTotalClp0CellsRxd	The value of tAtmVtlStatsTotalClp0CellsRxd indicates the number of valid ATM CLP=0 cells received by the VTL. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVtlStatsTotalClp0CellsTxd	UINT128	tAtmVtlStatsTotalClp0CellsTxd	The value of tAtmVtlStatsTotalClp0CellsTxd indicates the number of valid ATM CLP=0 cells transmitted by the VTL. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
IlmiStatistics MIB table name: TIMETRA-ATM-MIB.tAtmIlmiLinkStatisticsTable Monitored class: atm.IlmiLink			
inBadValueErrors	long	tAtmIlmiLinkInBadValueErrors	The value of tAtmIlmiLinkInBadValueErrors indicates the total number SNMP `BadValue' error messages received on this ILMI link.
inGeneralErrors	long	tAtmIlmiLinkInGeneralErrors	The value of tAtmIlmiLinkInGeneralErrors indicates the total number SNMP `General' error messages received on this ILMI link.
inGetNextRequest	long	tAtmIlmiLinkInGetNextRequestPdus	The value of tAtmIlmiLinkInGetNextRequestPdus indicates the total number 'GetNextRequest' SNMP PDUs received on this ILMI link.
inGetRequest	long	tAtmIlmiLinkInGetRequestPdus	The value of tAtmIlmiLinkInGetRequestPdus indicates the total number GetRequest SNMP PDUs received on this ILMI link.
inGetResponse	long	tAtmIlmiLinkInGetResponsePdus	The value of tAtmIlmiLinkInGetResponsePdus indicates the total number 'GetResponse' SNMP PDUs received on this ILMI link in response to 'GetRequest', 'GetNextRequest' and 'SetRequests' sent.

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5620 SAM counter name	Type	MIB counter name	Description
inNoSuchNameErrors	long	tAtmIlmiLinkInNoSuchNameErrors	The value of tAtmIlmiLinkInNoSuchNameErrors indicates the total number SNMP `NoSuchName' error messages received on this ILMI link.
inPdu	long	tAtmIlmiLinkInPdus	The value of tAtmIlmiLinkInPdus indicates the total number SNMP PDUs received on this ILMI link.
inReadOnlyErrors	long	tAtmIlmiLinkInReadOnlyErrors	The value of tAtmIlmiLinkInReadOnlyErrors indicates the total number SNMP `ReadOnly' error messages received on this ILMI link.
inSetRequestPackets	long	tAtmIlmiLinkInSetRequestPdus	The value of tAtmIlmiLinkInSetRequestPdus indicates the total number 'SetRequest' SNMP PDUs received on this ILMI link.
inTooBigErrors	long	tAtmIlmiLinkInTooBigErrors	The value of tAtmIlmiLinkInTooBigErrors indicates the total number SNMP `TooBig' error messages received on this ILMI link.
inTraps	long	tAtmIlmiLinkInTrapPdus	The value of tAtmIlmiLinkInTrapPdus indicates the total number Trap SNMP PDUs received on this ILMI link.
outBadValueErrors	long	tAtmIlmiLinkOutBadValueErrors	The value of tAtmIlmiLinkOutBadValueErrors indicates the total number SNMP `BadValue' error messages sent on this ILMI link.
outGeneralErrors	long	tAtmIlmiLinkOutGeneralErrors	The value of tAtmIlmiLinkOutGeneralErrors indicates the total number SNMP `General' error messages sent on this ILMI link.
outGetNextRequest	long	tAtmIlmiLinkOutGetNextRequestPdus	The value of tAtmIlmiLinkOutGetNextRequestPdus indicates the total number GetNextRequest SNMP PDUs sent on this ILMI link.
outGetRequest	long	tAtmIlmiLinkOutGetRequestPdus	The value of tAtmIlmiLinkOutGetRequestPdus indicates the total number GetRequest SNMP PDUs sent on this ILMI link.
outGetResponse	long	tAtmIlmiLinkOutGetResponsePdus	The value of tAtmIlmiLinkOutGetResponsePdus indicates the total number GetResponse SNMP PDUs sent on this ILMI link in response to GetRequest, GetNextRequest and 'SetRequests' received.
outNoSuchNameErrors	long	tAtmIlmiLinkOutNoSuchNameErrors	The value of tAtmIlmiLinkOutNoSuchNameErrors indicates the total number SNMP `NoSuchName' error messages sent on this ILMI link.
outPdu	long	tAtmIlmiLinkOutPdus	The value of tAtmIlmiLinkOutPdus indicates the total number SNMP PDUs sent on this ILMI link.

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5620 SAM counter name	Type	MIB counter name	Description
outReadOnlyErrors	long	tAtmIlmiLinkOutReadOnlyErrors	The value of tAtmIlmiLinkOutReadOnlyErrors indicates the total number SNMP `ReadOnly' error messages sent on this ILMI link.
outSetRequestPackets	long	tAtmIlmiLinkOutSetRequestPdus	The value of tAtmIlmiLinkOutSetRequestPdus indicates the total number 'SetRequest' SNMP PDUs sent on this ILMI link.
outTooBigErrors	long	tAtmIlmiLinkOutTooBigErrors	The value of tAtmIlmiLinkOutTooBigErrors indicates the total number SNMP `TooBig' error messages sent on this ILMI link.
outTraps	long	tAtmIlmiLinkOutTrapPdus	The value of tAtmIlmiLinkOutTrapPdus indicates the total number Trap SNMP PDUs sent on this ILMI link.
snmpCommStringErrors	long	tAtmIlmiLinkInInvalidSnmpCommunityStringPdus	The value of tAtmIlmiLinkInInvalidSnmpCommunityStringPdus indicates the total number SNMP PDUs received with invalid community string on this ILMI link.
snmpFormatErrors	long	tAtmIlmiLinkInInvalidSnmpFormatPdus	The value of tAtmIlmiLinkInInvalidSnmpFormatPdus indicates the total number SNMP PDUs received with invalid ASN.1 format on this ILMI link.
snmpVersionErrors	long	tAtmIlmiLinkInInvalidSnmpVersionPdus	The value of tAtmIlmiLinkInInvalidSnmpVersionPdus indicates the total number SNMP PDUs received with invalid version on this ILMI link.
InterfaceAal5Stats MIB table name: TIMETRA-ATM-MIB.tAtmIntfAal5StatsTable Monitored class: atm.Interface			
tAtmInterfaceAal5StatsTotalCrc32Errors	UINT128	tAtmIntfAal5StatsTotalCrc32Err	The value of tAtmIntfAal5StatsTotalCrc32Err indicates the number of Errors detected by the 32 bit cyclic redundancy check.
tAtmInterfaceAal5StatsTotalPktsDroppedRxd	UINT128	tAtmIntfAal5StatsTotalPktsDrpRxd	The value of tAtmIntfAal5StatsTotalPktsDrpRxd indicates the number of AAL5 PDUs dropped by the ATM interface in the receive direction. This count does not include crc32 Errors or oversized SDU discards.
tAtmInterfaceAal5StatsTotalPktsDroppedTxd	UINT128	tAtmIntfAal5StatsTotalPktsDrpTxd	The value of tAtmIntfAal5StatsTotalPktsDrpTxd indicates the number of AAL5 PDUs dropped in the transmit direction. This count does not include crc32 Errors or oversized SDU discards.
tAtmInterfaceAal5StatsTotalPktsRxd	UINT128	tAtmIntfAal5StatsTotalPktsRxd	The value of tAtmIntfAal5StatsTotalPktsRxd indicates the number of AAL5 PDUs that are received by the ATM interface.

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5620 SAM counter name	Type	MIB counter name	Description
tAtmInterfaceAal5StatsTotalPktsTxd	UINT128	tAtmIntfAal5StatsTotalPktsTxd	The value of tAtmIntfAal5StatsTotalPktsTxd indicates the number of AAL5 PDUs that are transmitted by the ATM interface.
InterfaceStats MIB table name: TIMETRA-ATM-MIB.tAtmIntfStatsTable Monitored class: atm.Interface			
tAtmInterfaceStatsTotalBytesRxd	UINT128	tAtmIntfStatsTotalBytesRxd	The value of tAtmIntfStatsTotalBytesRxd indicates the number of bytes received on this interface. This is the number of tAtmIntfStatsTotalCellsRxd multiplied by 53.
tAtmInterfaceStatsTotalBytesTxd	UINT128	tAtmIntfStatsTotalBytesTxd	The value of tAtmIntfStatsTotalBytesTxd indicates the number of bytes transmitted on this interface. This is the number of tAtmIntfStatsTotalCellsTxd multiplied by 53.
tAtmInterfaceStatsTotalCellsRxd	UINT128	tAtmIntfStatsTotalCellsRxd	The value of tAtmIntfStatsTotalCellsRxd indicates the number of valid ATM cells received by the ATM interface including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmInterfaceStatsTotalCellsTxd	UINT128	tAtmIntfStatsTotalCellsTxd	The value of tAtmIntfStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the ATM interface including both CLP=0 and CLP=1 cells.
tAtmInterfaceStatsTotalUnknownCellsDropped	long	tAtmIntfStatsTotalUnknCellsDrp	The value of tAtmIntfStatsTotalUnknCellsDrp indicates the number of cells dropped due to an unknown VPI/VCI.
PvcConnectionAal5PerformanceStats MIB table name: ATM-MIB.aal5VccTable Monitored class: atm.PvcConnection			
aal5CrcErrors	long	aal5VccCrcErrors	The number of AAL5 CPCS PDUs received with CRC-32 errors on this AAL5 VCC at the interface associated with an AAL5 entity.
aal5OverSizedSDUs	long	aal5VccOverSizedSDUs	The number of AAL5 CPCS PDUs discarded on this AAL5 VCC at the interface associated with an AAL5 entity because the AAL5 SDUs were too large.
aal5SarTimeOuts	long	aal5VccSarTimeOuts	The number of partially re-assembled AAL5 CPCS PDUs which were discarded on this AAL5 VCC at the interface associated with an AAL5 entity because they were not fully re-assembled within the required time period. If the re-assembly timer is not supported, then this object contains a zero value.
PvcConnectionAal5Stats MIB table name: TIMETRA-ATM-MIB.tAal5VccStatisticsTable Monitored class: atm.PvcConnection			

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5620 SAM counter name	Type	MIB counter name	Description
aal5DroppedPacketsRxd	UINT128	tAal5VccStatsDrpPacketsRxd	The value of tAal5VccStatsDrpPacketsRxd indicates the number of dropped AAL-5 SDUs that have been received on the AAL-5 VCC.
aal5DroppedPacketsTxd	UINT128	tAal5VccStatsDrpPacketsTxd	The value of tAal5VccStatsDrpPacketsTxd indicates the number of dropped AAL-5 SDUs that would have been transmitted on the AAL-5 VCC.
aal5PacketsRxd	UINT128	tAal5VccStatsPacketsRxd	The value of tAal5VccStatsPacketsRxd indicates the number of valid AAL-5 SDUs and AAL-5 SDUs with CRC-32 errors received by the AAL-5 VCC.
aal5PacketsTxd	UINT128	tAal5VccStatsPacketsTxd	The value of tAal5VccStatsPacketsTxd indicates the number of AAL-5 SDUs transmitted by the AAL-5 VCC.
PvcConnectionOamStats MIB table name: TIMETRA-ATM-MIB.tAtmOamVclStatisticsTable Monitored class: atm.PvcConnection			
oamAISCellsRxd	long	tAtmOamVclStatsAISCellsRxd	The value of tAtmOamVclStatsAISCellsRxd indicates the number of AIS cells received on this VC for both end to end and segment.
oamAISCellsTxd	long	tAtmOamVclStatsAISCellsTxd	The value of tAtmOamVclStatsAISCellsTxd indicates the number of AIS cells transmitted on this VC for both end to end and segment.
oamCrc10Errors	long	tAtmOamVclStatsCrc10Err	The value of tAtmOamVclStatsCrc10Err indicates the number of oam cells discarded with CRC 10 Errors.
oamLoopbackCellsRxd	long	tAtmOamVclStatsLoopbackCellsRxd	The value of tAtmOamVclStatsLoopbackCellsRxd indicates the number of loopback requests and responses received on this VC for both end to end and segment.
oamLoopbackCellsTxd	long	tAtmOamVclStatsLoopbackCellsTxd	The value of tAtmOamVclStatsLoopbackCellsTxd indicates the number of loopback requests and responses transmitted on this VC for both end to end and segment.
oamOtherCellsRxd	long	tAtmOamVclStatsOtherCellsRxd	This value of tAtmOamVclStatsOtherCellsRxd indicates the number of oam cells that are received but not identified.
oamRDICellsRxd	long	tAtmOamVclStatsRDICellsRxd	The value of tAtmOamVclStatsRDICellsRxd indicates the number of RDI cells received on this VC for both end to end and segment.
oamRDICellsTxd	long	tAtmOamVclStatsRDICellsTxd	The value of tAtmOamVclStatsRDICellsTxd indicates the number of RDI cells transmitted on this VC for both end to end and segment.

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5620 SAM counter name	Type	MIB counter name	Description
PvcConnectionStats MIB table name: TIMETRA-ATM-MIB.tAtmVclStatisticsTable Monitored class: atm.PvcConnection			
totalBytesRxd	UINT128	tAtmVclStatsTotalBytesRxd	The value of tAtmVclStatsTotalBytesRxd indicates the number of bytes received by this Vcl. This is the number of tAtmVclStatsTotalCellsRxd multiplied by 53.
totalBytesTxd	UINT128	tAtmVclStatsTotalBytesTxd	The value of tAtmVclStatsTotalBytesTxd indicates the number of bytes transmitted by this Vcl. This is the number of tAtmVclStatsTotalCellsTxd multiplied by 53.
totalPacketsRxd	UINT128	tAtmVclStatsTotalCellsRxd	The value of tAtmVclStatsTotalCellsRxd indicates the number of valid ATM cells received by the VCL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
totalPacketsTxd	UINT128	tAtmVclStatsTotalCellsTxd	The value of tAtmVclStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the VCL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
TCStats MIB table name: ATM-MIB.atmInterfaceTCTable Monitored class: atm.Interface			
ocdEvents	long	atmInterfaceOCDEvents	The number of times the Out of Cell Delineation (OCD) events occur. If seven consecutive ATM cells have Header Error Control (HEC) violations, an OCD event occurs. A high number of OCD events may indicate a problem with the TC Sublayer.
TCSubLayerStats MIB table name: TIMETRA-ATM-MIB.tAtmTCSublayerTable Monitored class: atm.Interface			
hecErrors	long	tAtmTCSublayerHecErrors	The value of tAtmTCSublayerHecErrors indicates the number of cells with uncorrectable HEC Errors on this interface.
hecErrorsFixed	long	tAtmTCSublayerHecErrorsFixed	The value of tAtmTCSublayerHecErrorsFixed indicates the number of cells with correctable HEC Errors on this interface.

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Table H-5 bgp statistics

5620 SAM counter name	Type	MIB counter name	Description
PeerAdditionalStats MIB table name: BGP4-MIB.bgpPeerTable Monitored class: bgp.Peer			
fsmEstablishedTime	long	bgpPeerFsmEstablishedTime	This timer indicates how long (in seconds) this peer has been in the Established state or how long since this peer was last in the Established state. It is set to zero when a new peer is configured or the router is booted.
PeerStats MIB table name: TIMETRA-BGP-MIB.tBgpPeerNgOperTable Monitored class: bgp.Peer			
flaps	long	tBgpPeerNgOperFlaps	tBgpPeerNgOperFlaps indicates the number of flaps of updates from this peer.
inputQueueMessages	long	tBgpPeerNgOperInputQueueMsgs	tBgpPeerNgOperInputQueueMsgs indicates the number of unprocessed messages in the queue, from this peer.
lastEvent	long	tBgpPeerNgOperLastEvent	tBgpPeerNgOperLastEvent indicates the last BGP event of this peer.
lastRestartTime	long	tBgpPeerNgOperLastRestartTime	tBgpPeerNgOperLastRestartTime indicates the last time the peer attempted restart.
lastState	long	tBgpPeerNgOperLastState	tBgpPeerNgOperLastState indicates the last BGP state of this peer.
mcastActivePrefixes	long	tBgpPeerNgOperMCastV4ActivePfxs	The value of tBgpPeerNgOperMCastV4ActivePfxs indicates the number of active IPv4 multicast prefixes from this peer.
mcastPrefixesSuppressedByDamping	long	tBgpPeerNgOperMCastV4SuppPfxDamp	The value of tBgpPeerNgOperMCastV4SuppPfxDamp indicates the number of IPv4 multicast prefixes from this peer, which have been suppressed by damping.
mcastReceivedPrefixes	long	tBgpPeerNgOperMCastV4RecvPfxs	The value of tBgpPeerNgOperMCastV4RecvPfxs indicates the number of IPv4 multicast prefixes received from this peer.
mcastSentPrefixes	long	tBgpPeerNgOperMCastV4SentPfxs	The value of tBgpPeerNgOperMCastV4SentPfxs indicates the number of IPv4 multicast prefixes transmitted to this peer.
messageOctetsReceived	UINT128	tBgpPeerNgOperMsgOctetsRcvd	tBgpPeerNgOperMsgOctetsRcvd indicates the number of octets received from this peer.
messageOctetsSent	UINT128	tBgpPeerNgOperMsgOctetsSent	tBgpPeerNgOperMsgOctetsSent indicates the number of octets transmitted to this peer.
numberOfRestarts	long	tBgpPeerNgOperNumRestarts	tBgpPeerNgOperNumRestarts indicates the number of times the peer has attempted restart.

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5620 SAM counter name	Type	MIB counter name	Description
outputQueueMessages	long	tBgpPeerNgOperOutputQueueMsgs	tBgpPeerNgOperOutputQueueMsgs indicates the number of untransmitted messages in the queue, to this peer.
pathsReceived	long	tBgpPeerNgOperReceivedPaths	tBgpPeerNgOperReceivedPaths indicates the number of paths received from this peer.
prefixesActive	long	tBgpPeerNgOperActivePrefixes	tBgpPeerNgOperActivePrefixes indicates the number of active IPv4 prefixes from this peer.
prefixesReceived	long	tBgpPeerNgOperReceivedPrefixes	tBgpPeerNgOperReceivedPrefixes indicates the number of IPv4 prefixes received from this peer.
prefixesSent	long	tBgpPeerNgOperSentPrefixes	tBgpPeerNgOperSentPrefixes indicates the number of IPv4 prefixes transmitted to this peer.
prefixesSuppressedByDamping	long	tBgpPeerNgOperV4SuppPfxDamp	The value of tBgpPeerNgOperV4SuppPfxDamp indicates the number of IPv6 prefixes from this peer, which have been suppressed by damping.
v6ActivePrefixes	long	tBgpPeerNgOperV6ActivePrefixes	The value of tBgpPeerNgOperV6ActivePrefixes indicates the number of active IPv6 prefixes from this peer.
v6PrefixesSuppressedByDamping	long	tBgpPeerNgOperV6SuppPfxDamp	The value of tBgpPeerNgOperV6SuppPfxDamp indicates the number of IPv6 prefixes from this peer, which have been suppressed by damping.
v6ReceivedPrefixes	long	tBgpPeerNgOperV6ReceivedPrefixes	The value of tBgpPeerNgOperV6ReceivedPrefixes indicates the number of IPv6 prefixes received from this peer.
v6SentPrefixes	long	tBgpPeerNgOperV6SentPrefixes	The value of tBgpPeerNgOperV6SentPrefixes indicates the number of IPv6 prefixes transmitted to this peer.
vpnActivePrefixes	long	tBgpPeerNgOperVpnActivePrefixes	tBgpPeerNgOperVpnActivePrefixes indicates the number of active VPN IPv4 prefixes from this BGP peer.
vpnPrefixesSuppressedByDamping	long	tBgpPeerNgOperVpnSuppPfxDamp	The value of tBgpPeerNgOperVpnSuppPfxDamp indicates the number of VPN IPv4 prefixes from this peer, which have been suppressed by damping.
vpnReceivedPrefixes	long	tBgpPeerNgOperVpnRecvPrefixes	tBgpPeerNgOperVpnRecvPrefixes indicates the number of received VPN IPv4 prefixes.
vpnSentPrefixes	long	tBgpPeerNgOperVpnSentPrefixes	tBgpPeerNgOperVpnSentPrefixes indicates the number of transmitted VPN IPv4 prefixes.

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5620 SAM counter name	Type	MIB counter name	Description
PeerVprnIpv6Stats MIB table name: TIMETRA-BGP-MIB.tBgpPeerNgOperTable Monitored class: bgp.Peer			
vpnIpv6ActivePfxs	long	tBgpPeerNgOperVpnIpv6ActivePfxs	The value of tBgpPeerNgOperVpnIpv6ActivePfxs indicates the number of active VPN IPv6 prefixes from this peer.
vpnIpv6RecvPfxs	long	tBgpPeerNgOperVpnIpv6RecvPfxs	The value of tBgpPeerNgOperVpnIpv6RecvPfxs indicates the number of VPN IPv6 prefixes received from this peer.
vpnIpv6SentPfxs	long	tBgpPeerNgOperVpnIpv6SentPfxs	The value of tBgpPeerNgOperVpnIpv6SentPfxs indicates the number of VPN IPv6 prefixes transmitted to this peer.
vpnIpv6SuppPfxDamp	long	tBgpPeerNgOperVpnIpv6SuppPfxDamp	The value of tBgpPeerNgOperVpnIpv6SuppPfxDamp indicates the number of VPN IPv6 prefixes from this peer, which have been suppressed by damping.

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Table H-6 bundle statistics

5620 SAM counter name	Type	MIB counter name	Description
BundleStats MIB table name: TIMETRA-PORT-MIB.tmnxBundleTable Monitored class: bundle.Interface			
inputDiscards	long	tmnxBundleInputDiscards	tmnxBundleInputDiscards indicates the number of LCP packets that were discarded. This object is only supported for a tmnxBundleType value of mlppp.
upTime	long	tmnxBundleUpTime	tmnxBundleUpTime indicates the time since the bundle is operationally 'inService'.
MultiClassMlpppStats MIB table name: TIMETRA-PORT-MIB.tmnxMcMlpppStatsTable Monitored class: bundle.MultiClassMlpppSpecifics			
mcMlpppStatsEgressErrPkt	long	tmnxMcMlpppStatsEgressErrPkt	The value of tmnxMcMlpppStatsEgressErrPkt indicates the total number of packets discarded due to segmentation errors on the bundle for the given class on egress.
mcMlpppStatsEgressOct	long	tmnxMcMlpppStatsEgressOct	The value of tmnxMcMlpppStatsEgressOct indicates the total number of octets in all packets received on the bundle for the given class on egress before segmentation.

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5620 SAM counter name	Type	MIB counter name	Description
mcMlpppStatsEgressPkt	long	tmnxMcMlpppStatsEgressPkt	The value of tmnxMcMlpppStatsEgressPkt indicates the total number of packets forwarded on the bundle for the given class on egress towards the line.
mcMlpppStatsIngressErrPkt	long	tmnxMcMlpppStatsIngressErrPkt	The value of tmnxMcMlpppStatsIngressErrPkt indicates the total number of packets discarded due to reassembly errors on the bundle for the given class on ingress.
mcMlpppStatsIngressOct	long	tmnxMcMlpppStatsIngressOct	The value of tmnxMcMlpppStatsIngressOct indicates the total number of octets in all packets received on the bundle for the given class on ingress before reassembly.
mcMlpppStatsIngressPkt	long	tmnxMcMlpppStatsIngressPkt	The value of tmnxMcMlpppStatsIngressPkt indicates the total number of packets forwarded on the bundle for the given class on ingress towards higher layer protocols.

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Table H-7 dhcp statistics

5620 SAM counter name	Type	MIB counter name	Description
LocalDhcpServerStats MIB table name: TIMETRA-DHCP-SERVER-MIB.tmnxDhcpServerStatsTable Monitored class: dhcp.LocalDhcpServer			
addressUnavailableDropped	long	tmnxDhcpSvrStatsDropAddrUnavail	The value of tmnxDhcpSvrStatsDropAddrUnavail indicates the number of DHCP requests dropped by the server instance because the requested address is not available.
corruptedPacketsDropped	long	tmnxDhcpSvrStatsDropBadPackets	The value of tmnxDhcpSvrStatsDropBadPackets indicates the number of DHCP packets received which were corrupt.
destinedToOtherDropped	long	tmnxDhcpSvrStatsDropDestOther	The value of tmnxDhcpSvrStatsDropDestOther indicates the number of DHCP requests dropped by the server instance because the (broadcast) request was not destined to this server.
genericErrorDropped	long	tmnxDhcpSvrStatsDropGenError	The value of tmnxDhcpSvrStatsDropGenError indicates the number of DHCP packets dropped by the server instance because of a generic error.
invalidMessageTypesDropped	long	tmnxDhcpSvrStatsDropInvalidTypes	The value of tmnxDhcpSvrStatsDropInvalidTypes indicates the number of DHCP packets received which had an invalid message type (option 53).

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5620 SAM counter name	Type	MIB counter name	Description
invalidUserDropped	long	tmnxDhcpSvrStatsDropInvalidUsr	The value of tmnxDhcpSvrStatsDropInvalidUsr indicates the number of DHCP packets dropped by the server instance because the MAC address of the sender or the option 82 didn't match the host lease state.
leaseNotFoundDropped	long	tmnxDhcpSvrStatsDropNoLeaseFound	The value of tmnxDhcpSvrStatsDropNoLeaseFound indicates the number of DHCP packets dropped by the server instance because no (valid) lease was found.
leaseNotReadyDropped	long	tmnxDhcpSvrStatsDropLseNotReady	The value of tmnxDhcpSvrStatsDropLseNotReady indicates the number of DHCP packets dropped by the server instance before the lease database was ready.
leasesExpired	long	tmnxDhcpSvrStatsLeasesExpired	The value of tmnxDhcpSvrStatsLeasesExpired indicates the number of DHCP leases that were expired (because no release was received).
localUserDbNotFoundDropped	long	tmnxDhcpSvrStatsDropNoUsrDbFound	The value of tmnxDhcpSvrStatsDropNoUsrDbFound indicates the number of DHCP packets dropped because the value of the object tmnxDhcpServerCfgUserDatabase of this server instance is not equal to the default value and a local user database with that name could not be found.
noFreeAddressesInPoolDropped	long	tmnxDhcpSvrStatsDropNotSrvngPool	The value of tmnxDhcpSvrStatsDropNotSrvngPool indicates the number of DHCP packets dropped by the server instance because there were no more free addresses in the pool.
offersIgnored	long	tmnxDhcpSvrStatsOffersIgnore	The value of tmnxDhcpSvrStatsOffersIgnore indicates the number of DHCPOFFER (option 52 with value 2) packets sent by the DHCP server instance that were ignored by he clients.
overloadDropped	long	tmnxDhcpSvrStatsDropOverload	The value of tmnxDhcpSvrStatsDropOverload indicates the number of DHCP packets dropped by the server instance because they were received in excess of what the server instance can handle.
persistenceOverloadDropped	long	tmnxDhcpSvrStatsDropPersOverload	The value of tmnxDhcpSvrStatsDropPersOverload indicates the number of DHCP packets dropped by the server instance because they were received in excess of what the DHCP persistence system can handle. If this occurs, only releases and declines are still processed.

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5620 SAM counter name	Type	MIB counter name	Description
receivedDhcpDeclines	UINT128	tmnxDhcpSvrStatsRxDeclines	The value of tmnxDhcpSvrStatsRxDeclines indicates the number of DHCPDECLINE (option 53 with value 4) packets received by the DHCP server instance.
receivedDhcpDiscovers	UINT128	tmnxDhcpSvrStatsRxDiscovers	The value of tmnxDhcpSvrStatsRxDiscovers indicates the number of DHCPDISCOVER (option 53 with value 1) packets received by the DHCP server instance.
receivedDhcpInforms	UINT128	tmnxDhcpSvrStatsRxInforms	The value of tmnxDhcpSvrStatsRxInforms indicates the number of DHCPINFORM (option 53 with value 8) packets received by the DHCP server instance.
receivedDhcpReleases	UINT128	tmnxDhcpSvrStatsRxReleases	The value of tmnxDhcpSvrStatsRxReleases indicates the number of DHCPRELEASE (option 53 with value 7) packets received by the DHCP server instance.
receivedDhcpRequests	UINT128	tmnxDhcpSvrStatsRxRequests	The value of tmnxDhcpSvrStatsRxRequests indicates the number of DHCPREQUEST (option 53 with value 3) packets received by the DHCP server instance.
sentDhcpAcks	UINT128	tmnxDhcpSvrStatsTxAcks	The value of tmnxDhcpSvrStatsTxAcks indicates the number of DHCPACK (option 53 with value 5) packets sent by the DHCP server instance.
sentDhcpForceRenews	UINT128	tmnxDhcpSvrStatsTxForceRenews	The value of tmnxDhcpSvrStatsTxForceRenews indicates the number of DHCPFORCERENEW (option 53 with value 9) packets sent by the DHCP server instance.
sentDhcpNaks	UINT128	tmnxDhcpSvrStatsTxNaks	The value of tmnxDhcpSvrStatsTxNaks indicates the number of DHCPNAK (option 53 with value 6) packets sent by the DHCP server instance.
sentDhcpOffers	UINT128	tmnxDhcpSvrStatsTxOffers	The value of tmnxDhcpSvrStatsTxOffers indicates the number of DHCPOFFER (option 53 with value 2) packets sent by the DHCP server instance.
unknownHostsDropped	long	tmnxDhcpSvrStatsDropUnknownHosts	The value of tmnxDhcpSvrStatsDropUnknownHosts indicates the number of DHCP packets dropped from hosts which were not found in the user database when tmnxDhcpServerCfgUseGiAddress was disabled.
userNotAllowedDropped	long	tmnxDhcpSvrStatsDropUserNotAllow	The value of tmnxDhcpSvrStatsDropUserNotAllow indicates the number of DHCP packets dropped from hosts which are found in the user database, but which have no address or pool specified, nor has tmnxDhcpServerCfgUseGiAddress set to 'true'.

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5620 SAM counter name	Type	MIB counter name	Description
LocalDhcpServerSubnetStats MIB table name: TIMETRA-DHCP-SERVER-MIB.tmnxDhcpSvrSubnetStatsTable Monitored class: dhcp.Subnet			
declinedAddresses	long	tmnxDhcpSvrSubnetStatsDeclined	The value of tmnxDhcpSvrSubnetStatsDeclined indicates the number of addresses in this subnet that are declined.
forceRenewPendingLeases	long	tmnxDhcpSvrSubnetStatsFRPending	The value of tmnxDhcpSvrSubnetStatsFRPending indicates the number of leases in this subnet that are in state 'forceRenewPending.
freeAddresses	long	tmnxDhcpSvrSubnetStatsFree	The value of tmnxDhcpSvrSubnetStatsFree indicates the number of addresses in this subnet that are free.
offeredLeases	long	tmnxDhcpSvrSubnetStatsOffered	The value of tmnxDhcpSvrSubnetStatsOffered indicates the number of leases in this subnet that are in state 'offered'.
removePendingLeases	long	tmnxDhcpSvrSubnetStatsRemPending	The value of tmnxDhcpSvrSubnetStatsRemPending indicates the number of leases in this subnet that are in state 'removePending'.
stableLeases	long	tmnxDhcpSvrSubnetStatsStable	The value of tmnxDhcpSvrSubnetStatsStable indicates the number of leases in this subnet that are in state 'stable'.

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Table H-8 equipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AllocatedMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryPoolAllocated Monitored class: equipment.SystemStatsHolder			
allocatedMemory	long	sgiMemoryPoolAllocated	The value of sgiMemoryPoolAllocated indicates the total memory currently allocated in memory-pools on the system. This memory may or may not be currently in use, but is pre-allocated should the software need to use it.
AvailableMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryAvailable Monitored class: equipment.SystemStatsHolder			
availableMemory	long	sgiMemoryAvailable	The value of sgiMemoryAvailable indicates the amount of free memory in the overall system that is not allocated to memory pools, but is available in case a memory pool needs to grow.

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5620 SAM counter name	Type	MIB counter name	Description
CiscoHDLCStats MIB table name: TIMETRA-PORT-MIB.tmnxCiscoHDLCStatsTable Monitored classes: • tdmequipment.DS3E3Channel • tdmequipment.DS0ChannelGroup			
discardStatInPkts	long	tmnxCiscoHDLCDiscardStatInPkts	tmnxCiscoHDLCDiscardStatInPkts indicates the number of inbound Cisco HDLC packets discarded.
discardStatOutPkts	long	tmnxCiscoHDLCDiscardStatOutPkts	tmnxCiscoHDLCDiscardStatOutPkts indicates the number of outbound Cisco HDLC packets discarded.
statInOctets	long	tmnxCiscoHDLCStatInOctets	tmnxCiscoHDLCStatInOctets indicates the number of inbound Cisco HDLC octets.
statInPkts	long	tmnxCiscoHDLCStatInPkts	tmnxCiscoHDLCStatInPkts indicates the number of inbound Cisco HDLC packets.
statOutOctets	long	tmnxCiscoHDLCStatOutOctets	tmnxCiscoHDLCStatOutOctets indicates the number of outbound Cisco HDLC octets.
statOutPkts	long	tmnxCiscoHDLCStatOutPkts	tmnxCiscoHDLCStatOutPkts indicates the number of outbound Cisco HDLC packets.
FibNextHopStats MIB table name: TIMETRA-VRTR-MIB.vRtrFibStatNextHopTable Monitored class: equipment.BaseCard			
ipActive	long	vRtrFibStatNextHopIPActive	vRtrFibStatNextHopIPActive indicates current active IP next-hop counts for the FIB on the IOM.
ipAvailable	long	vRtrFibStatNextHopIPAvailable	vRtrFibStatNextHopIPAvailable indicates the available IP next-hop counts for the FIB on the IOM.
tunnelActive	long	vRtrFibStatNextHopTunnelActive	vRtrFibStatNextHopTunnelActive indicates current active Tunnel next-hop counts for the FIB on the IOM.
tunnelAvailable	long	vRtrFibStatNextHopTunnelAvailable	vRtrFibStatNextHopTunnelAvailable indicates the available Tunnel next-hop counts for the FIB on the IOM.
FibStats MIB table name: TIMETRA-VRTR-MIB.vRtrFibStatTable Monitored class: equipment.BaseCard			
aggrRoutes	long	vRtrFibStatAggrRoutes	vRtrFibStatAggrRoutes indicates current aggregate route counts for the virtual router.
alarmCount	long	vRtrFibStatAlarmCount	vRtrFibStatAlarmCount indicates the number of times the FIB has raised an alarm due to high FIB usage.
bgpRoutes	long	vRtrFibStatBGPRoutes	vRtrFibStatBGPRoutes indicates current BGP route counts for the virtual router.
bgpVpnRoutes	long	vRtrFibStatBGPVpnRoutes	vRtrFibStatBGPVpnRoutes indicates current BGP VPN route counts for the virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
directRoutes	long	vRtrFibStatDirectRoutes	vRtrFibStatDirectRoutes indicates current direct route counts for the virtual router.
highUtilization	boolean	vRtrFibStatHighUtilization	vRtrFibStatHighUtilization indicates whether or not the FIB on the IOM is experiences persistent high occupancy.
hostRoutes	long	vRtrFibStatHostRoutes	vRtrFibStatHostRoutes indicates current host route counts for the virtual router.
isisRoutes	long	vRtrFibStatISISRoutes	vRtrFibStatISISRoutes indicates current ISIS route counts for the virtual router.
lastAlarmTime	long	vRtrFibStatLastAlarmTime	vRtrFibStatLastAlarmTime indicates the last time a high FIB usage alarm was raised.
managedRoutes	long	vRtrFibStatManagedRoutes	vRtrFibStatManagedRoutes indicates current managed route counts for the virtual router.
ospfRoutes	long	vRtrFibStatOSPFRoutes	vRtrFibStatOSPFRoutes indicates current OSPF route counts for the virtual router.
overflows	long	vRtrFibStatOverflows	vRtrFibStatOverflows indicates the number of times the FIB has run out of space.
ripRoutes	long	vRtrFibStatRIPRoutes	vRtrFibStatRIPRoutes indicates current RIP route counts for the virtual router.
staticRoutes	long	vRtrFibStatStaticRoutes	vRtrFibStatStaticRoutes indicates current static route counts for the virtual router.
subMgmtRoutes	long	vRtrFibStatSubMgmtRoutes	vRtrFibStatSubMgmtRoutes indicates current Sub-management route counts for the virtual router.
v6AggrRoutes	long	vRtrFibStatV6AggrRoutes	vRtrFibStatV6AggrRoutes indicates current aggregate route counts for the virtual router.
v6BGPRoutes	long	vRtrFibStatV6BGPRoutes	vRtrFibStatV6BGPRoutes indicates current BGP route counts for the virtual router.
v6BGPVpnRoutes	long	vRtrFibStatV6BGPVpnRoutes	vRtrFibStatV6BGPVpnRoutes indicates current BGP VPN route counts for the virtual router.
v6DirectRoutes	long	vRtrFibStatV6DirectRoutes	vRtrFibStatV6DirectRoutes indicates current direct route counts for the virtual router.
v6HostRoutes	long	vRtrFibStatV6HostRoutes	vRtrFibStatV6HostRoutes indicates current host route counts for the virtual router.
v6ISISRoutes	long	vRtrFibStatV6ISISRoutes	vRtrFibStatV6ISISRoutes indicates current ISIS route counts for the virtual router.
v6ManagedRoutes	long	vRtrFibStatV6ManagedRoutes	vRtrFibStatV6ManagedRoutes indicates current managed route counts for the virtual router.
v6OSPFRoutes	long	vRtrFibStatV6OSPFRoutes	vRtrFibStatV6OSPFRoutes indicates current OSPF route counts for the virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
v6RIPRoutes	long	vRtrFibStatV6RIPRoutes	vRtrFibStatV6RIPRoutes indicates current RIP route counts for the virtual router.
v6StaticRoutes	long	vRtrFibStatV6StaticRoutes	vRtrFibStatV6StaticRoutes indicates current static route counts for the virtual router.
v6SubMgmtRoutes	long	vRtrFibStatV6SubMgmtRoutes	vRtrFibStatV6SubMgmtRoutes indicates current Sub-management route counts for the virtual router.
InterfaceAdditionalStats MIB table name: IF-MIB.ifXTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
receivedBroadcastPackets	UINT128	ifHCInBroadcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of ifInBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedMulticastPackets	UINT128	ifHCInMulticastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifInMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedTotalOctets	UINT128	ifHCInOctets	The total number of octets received on the interface, including framing characters. This object is a 64-bit version of ifInOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	UINT128	ifHCInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of ifInUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedBroadcastPackets	UINT128	ifHCOutBroadcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedMulticastPackets	UINT128	ifHCOutMulticastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifOutMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedTotalOctets	UINT128	ifHCOutOctets	The total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of ifOutOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	UINT128	ifHCOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
InterfaceStats MIB table name: IF-MIB.ifTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			

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5620 SAM counter name	Type	MIB counter name	Description
outboundBadPackets	long	ifOutErrors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
outboundPacketsDiscarded	long	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedBadPackets	long	ifInErrors	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character- oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedOctets	long	ifInOctets	The total number of octets received on the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedPacketsDiscarded	long	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedUnicastPackets	long	ifInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnknownProtocolPackets	long	ifInUnknownProtos	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedOctets	long	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	long	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
MediaIndependentStats MIB table name: HC-RMON-MIB.mediaIndependentTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dropEvents	long	mediaIndependentDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.

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5620 SAM counter name	Type	MIB counter name	Description
droppedFrames	long	mediaIndependentDroppedFrames	The total number of frames which were received by the probe and therefore not accounted for in the mediaIndependentDropEvents, but for which the probe chose not to count for this entry for whatever reason. Most often, this event occurs when the probe is out of some resources and decides to shed load from this collection. This count does not include packets that were not counted because they had MAC-layer errors. Note that, unlike the dropEvents counter, this number is the exact number of frames dropped.
duplex	int	mediaIndependentDuplexMode	The current mode of this link. Note that if the link has full-duplex capabilities but is operating in half-duplex mode, this value will be halfduplex(1).
duplexChanges	long	mediaIndependentDuplexChanges	The number of times this link has changed from full-duplex mode to half-duplex mode or from half-duplex mode to full-duplex mode.
inputSpeed	long	mediaIndependentInputSpeed	The nominal maximum speed in kilobits per second of this half-duplex link or on the inbound connection of this full-duplex link. If the speed is unknown or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
outputSpeed	long	mediaIndependentOutputSpeed	The nominal maximum speed in kilobits per second of this full-duplex link in the direction of the network. If the speed is unknown, the link is half-duplex, or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
receivedBadPackets	long	mediaIndependentInErrors	The total number of bad packets received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedNonUnicastPackets	UINT128	mediaIndependentInNUCastHighCapacityPkts	The total number of non-unicast packets (including bad packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedOctets	UINT128	mediaIndependentInHighCapacityOctets	The total number of octets of data (including those in bad packets) received (excluding framing bits but including FCS octets) on a half-duplex link or on the inbound connection of a full-duplex link.
receivedPackets	UINT128	mediaIndependentInHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
transmittedBadPackets	long	mediaIndependentOutErrors	The total number of bad packets received on a full-duplex link in the direction of the network.
transmittedNonUnicastPackets	UINT128	mediaIndependentOutNUCastHighCapacityPkts	The total number of packets (including bad packets) received on a full-duplex link in the direction of the network.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedOctets	UINT128	mediaIndependentOutHighCapacityOctets	The total number of octets of data (including those in bad packets) received on a full-duplex link in the direction of the network (excluding framing bits but including FCS octets).
transmittedPackets	UINT128	mediaIndependentOutHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a full-duplex link in the direction of the network.
PortNetEgressStats MIB table name: TIMETRA-PORT-MIB.tmnxPortNetEgressStatsTable Monitored class: equipment.PhysicalPort			
inProfileOctetsDropped	UINT128	tmnxPortNetEgressDroInProfOcts	tmnxPortNetEgressDroInProfOcts indicates the number of conforming network egress octets dropped on this port using this queue.
inProfileOctetsForwarded	UINT128	tmnxPortNetEgressFwdInProfOcts	tmnxPortNetEgressFwdInProfOcts indicates the number of conforming network egress octets forwarded on this port using this queue.
inProfilePacketsDropped	UINT128	tmnxPortNetEgressDroInProfPkts	tmnxPortNetEgressDroInProfPkts indicates the number of conforming network egress packets dropped on this port using this queue.
inProfilePacketsForwarded	UINT128	tmnxPortNetEgressFwdInProfPkts	tmnxPortNetEgressFwdInProfPkts indicates the number of conforming network egress packets forwarded on this port using this queue.
outOfProfileOctetsDropped	UINT128	tmnxPortNetEgressDroOutProfOcts	tmnxPortNetEgressDroOutProfOcts indicates the number of exceeding network egress octets dropped on this port using this queue.
outOfProfileOctetsForwarded	UINT128	tmnxPortNetEgressFwdOutProfOcts	tmnxPortNetEgressFwdOutProfOcts indicates the number of exceeding network egress octets forwarded on this port using this queue.
outOfProfilePacketsDropped	UINT128	tmnxPortNetEgressDroOutProfPkts	tmnxPortNetEgressDroOutProfPkts indicates the number of exceeding network egress packets dropped on this port using this queue.
outOfProfilePacketsForwarded	UINT128	tmnxPortNetEgressFwdOutProfPkts	tmnxPortNetEgressFwdOutProfPkts indicates the number of exceeding network egress packets forwarded on this port using this queue.
queueId	long	tmnxPortNetEgressQueueIndex	tmnxPortNetEgressQueueIndex serves as the tertiary index. When used in conjunction with tmnxChassisIndex and tmnxPortPortID, it uniquely identifies a network egress queue for the specified port in the managed system.
PortNetIngressStats MIB table name: TIMETRA-PORT-MIB.tmnxPortNetIngressStatsTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
inProfileOctetsDropped	UINT128	tmnxPortNetIngressDroInProfOcts	tmnxPortNetIngressDroInProfOcts indicates the number of conforming network ingress octets dropped on this port using this queue.
inProfileOctetsForwarded	UINT128	tmnxPortNetIngressFwdInProfOcts	tmnxPortNetIngressFwdInProfOcts indicates the number of conforming network ingress octets forwarded on this port using this queue.
inProfilePacketsDropped	UINT128	tmnxPortNetIngressDroInProfPkts	tmnxPortNetIngressDroInProfPkts indicates the number of conforming network ingress packets dropped on this port using this queue.
inProfilePacketsForwarded	UINT128	tmnxPortNetIngressFwdInProfPkts	tmnxPortNetIngressFwdInProfPkts indicates the number of conforming network ingress packets forwarded on this port using this queue.
outOfProfileOctetsDropped	UINT128	tmnxPortNetIngressDroOutProfOcts	tmnxPortNetIngressDroOutProfOcts indicates the number of exceeding network ingress octets dropped on this port using this queue.
outOfProfileOctetsForwarded	UINT128	tmnxPortNetIngressFwdOutProfOcts	tmnxPortNetIngressFwdOutProfOcts indicates the number of exceeding network ingress octets forwarded on this port using this queue.
outOfProfilePacketsDropped	UINT128	tmnxPortNetIngressDroOutProfPkts	tmnxPortNetIngressDroOutProfPkts indicates the number of exceeding network ingress packets dropped on this port using this queue.
outOfProfilePacketsForwarded	UINT128	tmnxPortNetIngressFwdOutProfPkts	tmnxPortNetIngressFwdOutProfPkts indicates the number of exceeding network ingress packets forwarded on this port using this queue.
PortTerminationStats MIB table name: TIMETRA-PORT-MIB.tmnxBundleMemberImaTable Monitored class: bundle.PortTermination			
bundleMemberImaErrorIcpCells	long	tmnxBundleMemberImaErrorIcpCells	tmnxBundleMemberImaErrorIcpCells indicates the number of ICP cells with HEC or CRC-10 errors.
bundleMemberImaFeRxNumFails	long	tmnxBundleMemberImaFeRxNumFails	tmnxBundleMemberImaFeRxNumFails indicates the number of times that a far-end receive alarm is set on the IMA link.
bundleMemberImaFeRxUnuseSecs	long	tmnxBundleMemberImaFeRxUnuseSecs	tmnxBundleMemberImaFeRxUnuseSecs indicates the number of unavailable seconds at the far-end receive link state machine.
bundleMemberImaFeSevErrSecs	long	tmnxBundleMemberImaFeSevErrSecs	tmnxBundleMemberImaFeSevErrSecs indicates the number of one second intervals in which the far-end contains IMA-RDI defects.
bundleMemberImaFeTxNumFails	long	tmnxBundleMemberImaFeTxNumFails	tmnxBundleMemberImaFeTxNumFails indicates the number of times that a far-end transmit alarm is set on the IMA link.

5620 SAM counter name	Type	MIB counter name	Description
bundleMemberImaFeTxUnuseSecs	long	tmnxBundleMemberImaFeTxUnuseSecs	tmnxBundleMemberImaFeTxUnuseSecs indicates the number of unavailable seconds at the far-end transmit link state machine.
bundleMemberImaFeUnavailSecs	long	tmnxBundleMemberImaFeUnavailSecs	tmnxBundleMemberImaFeUnavailSecs indicates the number of unavailable seconds at the near-end.
bundleMemberImaLstRxIcpCells	long	tmnxBundleMemberImaLstRxIcpCells	tmnxBundleMemberImaLstRxIcpCells indicates the number of lost ICP cells at the expected offset.
bundleMemberImaNeRxNumFails	long	tmnxBundleMemberImaNeRxNumFails	tmnxBundleMemberImaNeRxNumFails indicates the number of times that a near-end receive alarm is set on the IMA link.
bundleMemberImaNeRxUnuseSecs	long	tmnxBundleMemberImaNeRxUnuseSecs	tmnxBundleMemberImaNeRxUnuseSecs indicates the number of unavailable seconds at the near-end receive link state machine.
bundleMemberImaNeSevErrSecs	long	tmnxBundleMemberImaNeSevErrSecs	tmnxBundleMemberImaNeSevErrSecs indicates the number of one second intervals in which thirty percent or more of the near-end ICP cells are in violation, or link defects have occurred.
bundleMemberImaNeTxNumFails	long	tmnxBundleMemberImaNeTxNumFails	tmnxBundleMemberImaNeTxNumFails indicates the number of times that a near-end transmit alarm is set on the IMA link.
bundleMemberImaNeTxUnuseSecs	long	tmnxBundleMemberImaNeTxUnuseSecs	tmnxBundleMemberImaNeTxUnuseSecs indicates the number of unavailable seconds at the near-end transmit link state machine.
bundleMemberImaNeUnavailSecs	long	tmnxBundleMemberImaNeUnavailSecs	tmnxBundleMemberImaNeUnavailSecs indicates the number of unavailable seconds at the near-end.
bundleMemberImaOifAnomalies	long	tmnxBundleMemberImaOifAnomalies	tmnxBundleMemberImaOifAnomalies indicates the number of OIF anomalies at the near-end.
bundleMemberImaRxIcpCells	long	tmnxBundleMemberImaRxIcpCells	tmnxBundleMemberImaRxIcpCells indicates the number of ICP cells that have been received on the IMA link.
bundleMemberImaTxIcpCells	long	tmnxBundleMemberImaTxIcpCells	tmnxBundleMemberImaTxIcpCells indicates the number of ICP cells that have been transmitted on the IMA link.
bundleMemberImaViolations	long	tmnxBundleMemberImaViolations	tmnxBundleMemberImaViolations indicates the number of ICP violations including errored, invalid or missing ICP cells.
SystemCpuStats MIB table name: TIMETRA-SYSTEM-MIB.sgiCpuUsage Monitored class: equipment.SystemStatsHolder			
systemCpuUsage	long	sgiCpuUsage	The value of sgiCpuUsage indicates the current CPU utilization for the system.

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5620 SAM counter name	Type	MIB counter name	Description
SystemMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryUsed Monitored class: equipment.SystemStatsHolder			
systemMemoryUsage	long	sgiMemoryUsed	The value of sgiMemoryUsed indicates the total pre-allocated pool memory currently in use on the system.

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Table H-9 ethernetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AdditionalEthernetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortEtherTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
highCapacityPackets1519toMaxFrameSize	UINT128	tmnxPortEtherHCPkts1519toMax	The total number of packets (including bad packets) received that were between 1519 octets in length and the maximum frame size, usually 12287 octets inclusive (excluding framing bits but including FCS octets). The lower 32-bits of this 64-bit counter will equal the value of tmnxPortEtherHCPkts1519toMax. The high 32-bits of this counter will equal the value of tmnxPortEtherHCOverPkts1519toMax.
packets1519toMaxFrameSize	long	tmnxPortEtherPkts1519toMax	The total number of packets received that were longer than 1518 octets but less than the maximum frame size for the particular medium, usually 12287 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
Dot3Stats MIB table name: EtherLike-MIB.dot3StatsTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
alignmentErrors	long	dot3StatsAlignmentErrors	A count of frames received on a particular interface that are not an integral number of octets in length and do not pass the FCS check. The count represented by an instance of this object is incremented when the alignmentError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. This counter does not increment for group encoding schemes greater than 4 bits per group. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsAlignmentErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.7, aAlignmentErrors.
carrierSenseErrors	long	dot3StatsCarrierSenseErrors	The number of times that the carrier sense condition was lost or never asserted when attempting to transmit a frame on a particular interface. The count represented by an instance of this object is incremented at most once per transmission attempt, even if the carrier sense condition fluctuates during a transmission attempt. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.13, aCarrierSenseErrors.

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5620 SAM counter name	Type	MIB counter name	Description
deferredTransmissions	long	dot3StatsDeferredTransmissions	A count of frames for which the first transmission attempt on a particular interface is delayed because the medium is busy. The count represented by an instance of this object does not include frames involved in collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.9, aFramesWithDeferredXmissions.
duplex	int	dot3StatsDuplexStatus	The current mode of operation of the MAC entity. 'unknown' indicates that the current duplex mode could not be determined. Management control of the duplex mode is accomplished through the MAU MIB. When an interface does not support autonegotiation, or when autonegotiation is not enabled, the duplex mode is controlled using ifMauDefaultType. When autonegotiation is supported and enabled, duplex mode is controlled using ifMauAutoNegAdvertisedBits. In either case, the currently operating duplex mode is reflected both in this object and in ifMauType. Note that this object provides redundant information with ifMauType. Normally, redundant objects are discouraged. However, in this instance, it allows a management application to determine the duplex status of an interface without having to know every possible value of ifMauType. This was felt to be sufficiently valuable to justify the redundancy. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.32, aDuplexStatus.
excessiveCollisions	long	dot3StatsExcessiveCollisions	A count of frames for which transmission on a particular interface fails due to excessive collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.11, aFramesAbortedDueToXSColls.

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5620 SAM counter name	Type	MIB counter name	Description
fcsErrors	long	dot3StatsFCSErrors	A count of frames received on a particular interface that are an integral number of octets in length but do not pass the FCS check. This count does not include frames received with frame-too-long or frame-too-short error. The count represented by an instance of this object is incremented when the frameCheckError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. Note: Coding errors detected by the physical layer for speeds above 10 Mb/s will cause the frame to fail the FCS check. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFCSErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.6, aFrameCheckSequenceErrors.
frameTooLongs	long	dot3StatsFrameTooLongs	A count of frames received on a particular interface that exceed the maximum permitted frame size. The count represented by an instance of this object is incremented when the frameTooLong status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. For interfaces operating at 10 Gb/s, this counter can roll over in less than 80 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFrameTooLongs object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.25, aFrameTooLongErrors.

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5620 SAM counter name	Type	MIB counter name	Description
internalMacReceiveErrors	long	dot3StatsInternalMacReceiveErrors	A count of frames for which reception on a particular interface fails due to an internal MAC sublayer receive error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsFrameTooLongs object, the dot3StatsAlignmentErrors object, or the dot3StatsFCSErrors object. The precise meaning of the count represented by an instance of this object is implementation-specific. In particular, an instance of this object may represent a count of receive errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacReceiveErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.15, aFramesLostDueToIntMACRcvError.
internalMacTransmitErrors	long	dot3StatsInternalMacTransmitErrors	A count of frames for which transmission on a particular interface fails due to an internal MAC sublayer transmit error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsLateCollisions object, the dot3StatsExcessiveCollisions object, or the dot3StatsCarrierSenseErrors object. The precise meaning of the count represented by an instance of this object is implementation- specific. In particular, an instance of this object may represent a count of transmission errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacTransmitErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.12, aFramesLostDueToIntMACXmitError.

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5620 SAM counter name	Type	MIB counter name	Description
lateCollisions	long	dot3StatsLateCollisions	The number of times that a collision is detected on a particular interface later than one slotTime into the transmission of a packet. A (late) collision included in a count represented by an instance of this object is also considered as a (generic) collision for purposes of other collision-related statistics. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.10, aLateCollisions.
multipleCollisionFrames	long	dot3StatsMultipleCollisionFrames	A count of frames that are involved in more than one collision and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsSingleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.4, aMultipleCollisionFrames.
singleCollisionFrames	long	dot3StatsSingleCollisionFrames	A count of frames that are involved in a single collision, and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsMultipleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.3, aSingleCollisionFrames.

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5620 SAM counter name	Type	MIB counter name	Description
sqeTestErrors	long	dot3StatsSQETestErrors	A count of times that the SQE TEST ERROR is received on a particular interface. The SQE TEST ERROR is set in accordance with the rules for verification of the SQE detection mechanism in the PLS Carrier Sense Function as described in IEEE Std. 802.3, 2000 Edition, section 7.2.4.6. This counter does not increment on interfaces operating at speeds greater than 10 Mb/s, or on interfaces operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 7.2.4.6, also 30.3.2.1.4, aSQETestErrors.

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5620 SAM counter name	Type	MIB counter name	Description
symbolErrors	long	dot3StatsSymbolErrors	For an interface operating at 100 Mb/s, the number of times there was an invalid data symbol when a valid carrier was present. For an interface operating in half-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than slotTime, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' or 'carrier extend error' on the GMII. For an interface operating in full-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' on the GMII. For an interface operating at 10 Gb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Receive Error' on the XGMII. The count represented by an instance of this object is incremented at most once per carrier event, even if multiple symbol errors occur during the carrier event. This count does not increment if a collision is present. This counter does not increment when the interface is operating at 10 Mb/s. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsSymbolErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.2.1.5, aSymbolErrorDuringCarrier.
EthernetHighCapacityStats MIB table name: HC-RMON-MIB.etherStatsHighCapacityTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
packets1024to1518Octets	UINT128	etherStatsHighCapacityPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
packets128to255Octets	UINT128	etherStatsHighCapacityPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	UINT128	etherStatsHighCapacityPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	UINT128	etherStatsHighCapacityPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	UINT128	etherStatsHighCapacityPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	UINT128	etherStatsHighCapacityPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	UINT128	etherStatsHighCapacityOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). If the network is half-duplex Fast Ethernet, this object can be used as a reasonable estimate of utilization. If greater precision is desired, the etherStatsHighCapacityPkts and etherStatsHighCapacityOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (.96 + .64) + (Octets * .08) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent. This table is not appropriate for monitoring full-duplex ethernets. If the network is a full-duplex ethernet and the mediaIndependentTable is monitoring that network, the utilization can be calculated as follows: 1) Determine the utilization of the inbound path by using the appropriate equation (for ethernet or fast ethernet) to determine the utilization, substituting mediaIndependentInPkts for etherStatsHighCapacityPkts, and mediaIndependentInOctets for etherStatsHighCapacityOctets. Call the resulting utilization inUtilization. 2) Determine the utilization of the outbound path by using the same equation to determine the utilization, substituting mediaIndependentOutPkts for etherStatsHighCapacityPkts, and mediaIndependentOutOctets for etherStatsHighCapacityOctets. Call the resulting utilization outUtilization. 3) The utilization is the maximum of inUtilization and outUtilization. This metric shows the amount of percentage of bandwidth that is left before congestion will be experienced on the link.
totalPackets	UINT128	etherStatsHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
EthernetStats MIB table name: RMON-MIB.etherStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
broadcastPackets	long	etherStatsBroadcastPkts	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets.

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5620 SAM counter name	Type	MIB counter name	Description
collisions	long	etherStatsCollisions	The best estimate of the total number of collisions on this Ethernet segment. The value returned will depend on the location of the RMON probe. Section 8.2.1.3 (10BASE-5) and section 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision, in the receive mode, if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coax segments to which the repeater is connected.
crcAlignErrors	long	etherStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
dropEvents	long	etherStatsDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
fragments	long	etherStatsFragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that it is entirely normal for etherStatsFragments to increment. This is because it counts both runts (which are normal occurrences due to collisions) and noise hits.

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5620 SAM counter name	Type	MIB counter name	Description
jabbers	long	etherStatsJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different than the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition where any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
multicastPackets	long	etherStatsMulticastPkts	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address.
oversizePackets	long	etherStatsOversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
packets1024to1518Octets	long	etherStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).
packets128to255Octets	long	etherStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	long	etherStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	long	etherStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	long	etherStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	long	etherStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	long	etherStatsOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). This object can be used as a reasonable estimate of 10-Megabit ethernet utilization. If greater precision is desired, the etherStatsPkts and etherStatsOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (9.6 + 6.4) + (Octets * .8) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent.
totalPackets	long	etherStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
undersizePackets	long	etherStatsUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.
OtuIfStats MIB table name: TIMETRA-OTU-MIB.tmnxOtuIfRawStatsTable Monitored class: equipment.PhysicalPort			
fecCorrOnes	long	tmnxOtuIfRawStatsFECCorrOnes	The value of tmnxOtuIfRawStatsFECCorrOnes indicates the number of Forward Error Correction (FEC) corrected ones.
fecCorrZeros	long	tmnxOtuIfRawStatsFECCorrZeros	The value of tmnxOtuIfRawStatsFECCorrZeros indicates the number of Forward Error Correction (FEC) corrected zeros.
fecSes	long	tmnxOtuIfRawStatsFECSES	The value of tmnxOtuIfRawStatsFECSES indicates the number of Forward Error Correction (FEC) Severely Errors Seconds (SES).
fecUncorrSr	long	tmnxOtuIfRawStatsFECUncorrSR	The value of tmnxOtuIfRawStatsFECUncorrSR indicates the number of Forward Error Correction (FEC) Uncorrectable Sub-Rows.
hcFecCorrOnes	UINT128	tmnxOtuIfRawStatsHCFECCorrOnes	The value of tmnxOtuIfRawStatsFECCorrOnes indicates the High Capacity number of Forward Error Correction (FEC) corrected ones.
hcFecCorrZeros	UINT128	tmnxOtuIfRawStatsHCFECCorrZeros	The value of tmnxOtuIfRawStatsHCFECCorrZeros indicates the High Capacity number of Forward Error Correction (FEC) corrected zeros.

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5620 SAM counter name	Type	MIB counter name	Description
hcFecUncorrSr	UINT128	tmnxOtuIfRawStatsHCFECUncorrSR	The value of tmnxOtuIfRawStatsHCFECUncorrSR indicates the High Capacity number of Forward Error Correction (FEC) Uncorrectable Sub-Rows.
hcPmBei	UINT128	tmnxOtuIfRawStatsHCPMBEI	The value of tmnxOtuIfRawStatsPMBEI indicates the High Capacity number of Path Monitoring (PM) Backward Error Indication (BEI) errors.
hcPmBip8	UINT128	tmnxOtuIfRawStatsHCPMBIP8	The value of tmnxOtuIfRawStatsHCPMBIP8 indicates the High Capacity number of Path Monitoring (PM) BIP8 errors.
hcSmBei	UINT128	tmnxOtuIfRawStatsHCSMBEI	The value of tmnxOtuIfRawStatsHCSMBEI indicates the High Capacity number of Section Monitoring (SM) Backward Error Indication (BEI) errors.
hcSmBip8	UINT128	tmnxOtuIfRawStatsHCSMBIP8	The value of tmnxOtuIfRawStatsHCSMBIP8 indicates the High Capacity number of Section Monitoring (SM) BIP8 errors.
ofFecCorrOnes	long	tmnxOtuIfRawStatsOFFECCorrOnes	The value of tmnxOtuIfRawStatsFECCorrOnes indicates the number of times the tmnxOtuIfRawStatsFECCorrOnes overflowed.
ofFecCorrZeros	long	tmnxOtuIfRawStatsOFFECCorrZeros	The value of tmnxOtuIfRawStatsOFFECCorrZeros indicates the number of times the tmnxOtuIfRawStatsFECCorrZeros overflowed.
ofFecUncorrSr	long	tmnxOtuIfRawStatsOFFECUncorrSR	The value of tmnxOtuIfRawStatsOFFECUncorrSR indicates the number of times the tmnxOtuIfRawStatsFECUncorrSR overflowed.
ofPmBei	long	tmnxOtuIfRawStatsOFPMBEI	The value of tmnxOtuIfRawStatsOFPMBEI indicates the number of times tmnxOtuIfRawStatsPMBEI overflowed.
ofPmBip8	long	tmnxOtuIfRawStatsOFPMBIP8	The value of tmnxOtuIfRawStatsOFPMBIP8 indicates the number of times the tmnxOtuIfRawStatsPMBIP8 overflowed.
ofSmBei	long	tmnxOtuIfRawStatsOFSMBEI	The value of tmnxOtuIfRawStatsOFSMBEI indicates the number of times the tmnxOtuIfRawStatsSMBEI overflowed.
ofSmBip8	long	tmnxOtuIfRawStatsOFSMBIP8	The value of tmnxOtuIfRawStatsOFSMBIP8 indicates the number of times the tmnxOtuIfRawStatsSMBIP8 overflowed.
pmBei	long	tmnxOtuIfRawStatsPMBEI	The value of tmnxOtuIfRawStatsPMBEI indicates the number of Path Monitoring (PM) Backward Error Indication (BEI) errors.
pmBip8	long	tmnxOtuIfRawStatsPMBIP8	The value of tmnxOtuIfRawStatsPMBIP8 indicates the number of Path Monitoring (PM) BIP8 errors.

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5620 SAM counter name	Type	MIB counter name	Description
pmSes	long	tmnxOtuIfRawStatsPMSES	The value of tmnxOtuIfRawStatsPMSES indicates the number of Path Monitoring (PM) Severely Errored Seconds (SES).
smBei	long	tmnxOtuIfRawStatsSMBEI	The value of tmnxOtuIfRawStatsSMBEI indicates the number of Section Monitoring (SM) Backward Error Indication (BEI) errors.
smBip8	long	tmnxOtuIfRawStatsSMBIP 8	The value of tmnxOtuIfRawStatsSMBIP8 indicates the number of Section Monitoring (SM) BIP8 errors.
smSes	long	tmnxOtuIfRawStatsSMSES	The value of tmnxOtuIfRawStatsSMSES indicates the number of Section Monitoring (SM) Severely Errored Seconds (SES).
PortEgrQosQueueStat MIB table name: TIMETRA-PORT-MIB.tmnxPortEgrQosQStatTable Monitored class: ethernetequipment.AccessEgrQGroup			
portEgrQosQStatDpdInProfOcts	UINT128	tmnxPortEgrQosQStatDpd InProfOcts	The value of tmnxPortEgrQosQStatDpdInProfOcts indicates the number of in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatDpdInProfPkts	UINT128	tmnxPortEgrQosQStatDpd InProfPkts	The value of tmnxPortEgrQosQStatDpdInProfPkts indicates the number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatDpdOutProfOcts	UINT128	tmnxPortEgrQosQStatDpd OutProfOcts	The value of tmnxPortEgrQosQStatDpdOutProfOcts indicates the number of out-of-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatDpdOutProfPkts	UINT128	tmnxPortEgrQosQStatDpd OutProfPkts	The value of tmnxPortEgrQosQStatDpdOutProfPkts indicates the number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatFwdInProfOcts	UINT128	tmnxPortEgrQosQStatFwd InProfOcts	The value of tmnxPortEgrQosQStatFwdInProfOcts indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
portEgrQosQStatFwdInProfPkts	UINT128	tmnxPortEgrQosQStatFwd InProfPkts	The value of tmnxPortEgrQosQStatFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
portEgrQosQStatFwdOutProfOcts	UINT128	tmnxPortEgrQosQStatFwd OutProfOcts	The value of tmnxPortEgrQosQStatFwdOutProfOcts indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
portEgrQosQStatFwdOutProfPkts	UINT128	tmnxPortEgrQosQStatFwdOutProfPkts	The value of tmnxPortEgrQosQStatFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
portEgrQosQStatQueueId	long	tmnxPortEgrQosQStatQueueId	The value of tmnxPortEgrQosQStatQueueId specifies the queue-group queue ID which is used as the fourth index to the table entry.
PortIngQosQueueStat MIB table name: TIMETRA-PORT-MIB.tmnxPortIngQosQStatTable Monitored class: ethernetequipment.AccessIngrQGroup			
portIngQosQStatDpdHiPrioOcts	UINT128	tmnxPortIngQosQStatDpdHiPrioOcts	The value of tmnxPortIngQosQStatDpdHiPrioOcts indicates the number of high priority octets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatDpdHiPrioPkts	UINT128	tmnxPortIngQosQStatDpdHiPrioPkts	The value of tmnxPortIngQosQStatDpdHiPrioPkts indicates the number of high priority packets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatDpdLoPrioOcts	UINT128	tmnxPortIngQosQStatDpdLoPrioOcts	The value of tmnxPortIngQosQStatDpdLoPrioOcts indicates the number of low priority octets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatDpdLoPrioPkts	UINT128	tmnxPortIngQosQStatDpdLoPrioPkts	The value of tmnxPortIngQosQStatDpdLoPrioPkts indicates the number of low priority packets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatFwdInProfOcts	UINT128	tmnxPortIngQosQStatFwdInProfOcts	The value of tmnxPortIngQosQStatFwdInProfOcts indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
portIngQosQStatFwdInProfPkts	UINT128	tmnxPortIngQosQStatFwdInProfPkts	The value of tmnxPortIngQosQStatFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
portIngQosQStatFwdOutProfOcts	UINT128	tmnxPortIngQosQStatFwdOutProfOcts	The value of tmnxPortIngQosQStatFwdOutProfOcts indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
portIngQosQStatFwdOutProfPkts	UINT128	tmnxPortIngQosQStatFwdOutProfPkts	The value of tmnxPortIngQosQStatFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
portIngQosQStatOffHiPrioOcts	UINT128	tmnxPortIngQosQStatOffHiPrioOcts	The value of tmnxPortIngQosQStatOffHiPrioOcts indicates the number of high priority octets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatOffHiPrioPkts	UINT128	tmnxPortIngQosQStatOffHiPrioPkts	The value of tmnxPortIngQosQStatOffHiPrioPkts indicates the number of high priority packets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatOffLoPrioOcts	UINT128	tmnxPortIngQosQStatOffLoPrioOcts	The value of tmnxPortIngQosQStatOffLoPrioOcts indicates the number of low priority octets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatOffLoPrioPkts	UINT128	tmnxPortIngQosQStatOffLoPrioPkts	The value of tmnxPortIngQosQStatOffLoPrioPkts indicates the number of low priority packets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatQueueId	long	tmnxPortIngQosQStatQueueId	The value of tmnxPortIngQosQStatQueueId specifies the queue-group queue ID which is used as the fourth index to the table entry.
portIngQosQStatUncolOctsOff	UINT128	tmnxPortIngQosQStatUncolOctsOff	The value of tmnxPortIngQosQStatUncolOctsOff indicates the number of uncolored octets offered to the ingress Qchip.
portIngQosQStatUncolPktsOff	UINT128	tmnxPortIngQosQStatUncolPktsOff	The value of tmnxPortIngQosQStatUncolPktsOff indicates the number of uncolored packets offered to the ingress Qchip.
PortNetEgrQueueStat MIB table name: TIMETRA-PORT-MIB.tmnxPortNetEgrQStatTable Monitored class: ethernetequipment.NetworkEgrQGroup			
portNetEgrQDroInProfOcts	UINT128	tmnxPortNetEgrQDroInProfOcts	The value of tmnxPortNetEgrQDroInProfOcts indicates the number of conforming network egress octets dropped on this port using this queue-group queue.
portNetEgrQDroInProfPkts	UINT128	tmnxPortNetEgrQDroInProfPkts	The value of tmnxPortNetEgrQDroInProfPkts indicates the number of conforming network egress packets dropped on this port using this queue-group queue.

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5620 SAM counter name	Type	MIB counter name	Description
portNetEgrQDroOutProfOcts	UINT128	tmnxPortNetEgrQDroOutProfOcts	The value of tmnxPortNetEgrQDroOutProfOcts indicates the number of exceeding network egress octets dropped on this port using this queue-group queue.
portNetEgrQDroOutProfPkts	UINT128	tmnxPortNetEgrQDroOutProfPkts	The value of tmnxPortNetEgrQDroOutProfPkts indicates the number of exceeding network egress packets dropped on this port using this queue-group queue.
portNetEgrQFwdInProfOcts	UINT128	tmnxPortNetEgrQFwdInProfOcts	The value of tmnxPortNetEgrQFwdInProfOcts indicates the number of conforming network egress octets forwarded on this port using this queue-group queue.
portNetEgrQFwdInProfPkts	UINT128	tmnxPortNetEgrQFwdInProfPkts	The value of tmnxPortNetEgrQFwdInProfPkts indicates the number of conforming network egress packets forwarded on this port using this queue-group queue.
portNetEgrQFwdOutProfOcts	UINT128	tmnxPortNetEgrQFwdOutProfOcts	The value of tmnxPortNetEgrQFwdOutProfOcts indicates the number of exceeding network egress octets forwarded on this port using this queue-group queue.
portNetEgrQFwdOutProfPkts	UINT128	tmnxPortNetEgrQFwdOutProfPkts	The value of tmnxPortNetEgrQFwdOutProfPkts indicates the number of exceeding network egress packets forwarded on this port using this queue-group queue.
portNetEgrQStatQueueId	long	tmnxPortEgrQosQStatQueueId	The value of tmnxPortEgrQosQStatQueueId specifies the queue-group queue ID which is used as the fourth index to the table entry.
QosDroppedOctetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortIngrMdaQosStatTable Monitored class: equipment.PhysicalPort			
qosClassifier0DroppedOctets	UINT128	tmnxPortIngrMdaQos00StatDropOcts	tmnxPortIngrMdaQos00StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier10DroppedOctets	UINT128	tmnxPortIngrMdaQos10StatDropOcts	tmnxPortIngrMdaQos10StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier11DroppedOctets	UINT128	tmnxPortIngrMdaQos11StatDropOcts	tmnxPortIngrMdaQos11StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier12DroppedOctets	UINT128	tmnxPortIngrMdaQos12StatDropOcts	tmnxPortIngrMdaQos12StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier13DroppedOctets	UINT128	tmnxPortIngrMdaQos13StatDropOcts	tmnxPortIngrMdaQos13StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier14DroppedOctets	UINT128	tmnxPortIngrMdaQos14StatDropOcts	tmnxPortIngrMdaQos14StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier15DroppedOctets	UINT128	tmnxPortIngrMdaQos15StatDropOcts	tmnxPortIngrMdaQos15StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier1DroppedOctets	UINT128	tmnxPortIngrMdaQos01StatDropOcts	tmnxPortIngrMdaQos01StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier2DroppedOctets	UINT128	tmnxPortIngrMdaQos02StatDropOcts	tmnxPortIngrMdaQos02StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier3DroppedOctets	UINT128	tmnxPortIngrMdaQos03StatDropOcts	tmnxPortIngrMdaQos03StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier4DroppedOctets	UINT128	tmnxPortIngrMdaQos04StatDropOcts	tmnxPortIngrMdaQos04StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier5DroppedOctets	UINT128	tmnxPortIngrMdaQos05StatDropOcts	tmnxPortIngrMdaQos05StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier6DroppedOctets	UINT128	tmnxPortIngrMdaQos06StatDropOcts	tmnxPortIngrMdaQos06StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier7DroppedOctets	UINT128	tmnxPortIngrMdaQos07StatDropOcts	tmnxPortIngrMdaQos07StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier8DroppedOctets	UINT128	tmnxPortIngrMdaQos08StatDropOcts	tmnxPortIngrMdaQos08StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier9DroppedOctets	UINT128	tmnxPortIngrMdaQos09StatDropOcts	tmnxPortIngrMdaQos09StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
QosDroppedPacketStats MIB table name: TIMETRA-PORT-MIB.tmnxPortIngrMdaQosStatTable Monitored class: equipment.PhysicalPort			
qosClassifier0DroppedPackets	UINT128	tmnxPortIngrMdaQos00StatDropPkts	tmnxPortIngrMdaQos00StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier10DroppedPackets	UINT128	tmnxPortIngrMdaQos10StatDropPkts	tmnxPortIngrMdaQos10StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier11DroppedPackets	UINT128	tmnxPortIngrMdaQos11StatDropPkts	tmnxPortIngrMdaQos11StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier12DroppedPackets	UINT128	tmnxPortIngrMdaQos12StatDropPkts	tmnxPortIngrMdaQos12StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier13DroppedPackets	UINT128	tmnxPortIngrMdaQos13StatDropPkts	tmnxPortIngrMdaQos13StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier14DroppedPackets	UINT128	tmnxPortIngrMdaQos14StatDropPkts	tmnxPortIngrMdaQos14StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier15DroppedPackets	UINT128	tmnxPortIngrMdaQos15StatDropPkts	tmnxPortIngrMdaQos15StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier1DroppedPackets	UINT128	tmnxPortIngrMdaQos01StatDropPkts	tmnxPortIngrMdaQos01StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier2DroppedPackets	UINT128	tmnxPortIngrMdaQos02StatDropPkts	tmnxPortIngrMdaQos02StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier3DroppedPackets	UINT128	tmnxPortIngrMdaQos03StatDropPkts	tmnxPortIngrMdaQos03StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier4DroppedPackets	UINT128	tmnxPortIngrMdaQos04StatDropPkts	tmnxPortIngrMdaQos04StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier5DroppedPackets	UINT128	tmnxPortIngrMdaQos05StatDropPkts	tmnxPortIngrMdaQos05StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier6DroppedPackets	UINT128	tmnxPortIngrMdaQos06StatDropPkts	tmnxPortIngrMdaQos06StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier7DroppedPackets	UINT128	tmnxPortIngrMdaQos07StatDropPkts	tmnxPortIngrMdaQos07StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier8DroppedPackets	UINT128	tmnxPortIngrMdaQos08StatDropPkts	tmnxPortIngrMdaQos08StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier9DroppedPackets	UINT128	tmnxPortIngrMdaQos09StatDropPkts	tmnxPortIngrMdaQos09StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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Table H-10 fr statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: TIMETRA-PORT-MIB.tmnxFRDlcmiTable Monitored class: fr.Interface			
lmiDiscardedMessages	long	tmnxFRDlcmiDiscardedMsgs	tmnxFRDlcmiDiscardedMsgs indicates the number of times the LMI agent discarded a received message because it wasn't expecting it, the type of message was incorrect, or the contents of the message were invalid.

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5620 SAM counter name	Type	MIB counter name	Description
lmiInvalidRxSeqNumMessages	long	tmnxFRDlcmiInvRxSeqNumMsgs	tmnxFRDlcmiInvRxSeqNumMsgs indicates the number of times the LMI agent received a message with an invalid receive sequence number: i.e. a sequence number that does not match the last transmitted sequence number of the agent.
lmiRxStatusEnquiryMessages	long	tmnxFRDlcmiRxStatusEnqMsgs	tmnxFRDlcmiRxStatusEnqMsgs indicates the number of LMI Status Enquiry messages received on this Frame Relay interface.
lmiRxStatusMessages	long	tmnxFRDlcmiRxStatusMsgs	tmnxFRDlcmiRxStatusMsgs indicates the number of LMI Status messages received on this Frame Relay interface.
lmiStatusEnquiryMsgTimeouts	long	tmnxFRDlcmiStatusEnqMsgTimeouts	tmnxFRDlcmiStatusEnqMsgTimeouts indicates the number of times the LMI agent did not receive a Status Enquiry message within the allotted time.
lmiStatusMsgTimeouts	long	tmnxFRDlcmiStatusMsgTimeouts	tmnxFRDlcmiStatusMsgTimeouts indicates the number of times the LMI agent did not receive a Status message within the allotted time.
lmiTxStatusEnquiryMessages	long	tmnxFRDlcmiTxStatusEnqMsgs	tmnxFRDlcmiTxStatusEnqMsgs indicates the number of LMI Status Enquiry messages transmitted on this Frame Relay interface.
lmiTxStatusMessages	long	tmnxFRDlcmiTxStatusMsgs	tmnxFRDlcmiTxStatusMsgs indicates the number of LMI Status messages transmitted on this Frame Relay interface.

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Table H-11 gsmp statistics

5620 SAM counter name	Type	MIB counter name	Description
GsmpSessionStats MIB table name: TIMETRA-GSMP-MIB.tmnxAncpSessionStatsTable Monitored class: gsmp.GsmpGroupNeighborSession			
ancpAckReceived	long	tmnxAncpSesStatRxAck	The value of tmnxAncpSesStatRxAck indicates the number of GSMP ACK messages received in this ANCP session.
ancpAckTransmitted	long	tmnxAncpSesStatTxAck	The value of tmnxAncpSesStatTxAck indicates the number of GSMP ACK messages that were transmitted to the ANCP neighbor in this ANCP session.
ancpLoopBackReceived	long	tmnxAncpSesStatRxLoopback	The value of tmnxAncpSesStatRxLoopback indicates the number of GSMP Loopback messages received in this ANCP session.
ancpLoopBackTransmitted	long	tmnxAncpSesStatTxLoopback	The value of tmnxAncpSesStatTxLoopback indicates the number of GSMP Loopback messages that were transmitted to the ANCP neighbor in this ANCP session.

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5620 SAM counter name	Type	MIB counter name	Description
ancpPortDownReceived	long	tmnxAncpSesStatRxPortDown	The value of tmnxAncpSesStatRxPortDown indicates the number of GSMP 'PortDown' messages received in this ANCP session.
ancpPortDownTransmitted	long	tmnxAncpSesStatTxPortDown	The value of tmnxAncpSesStatTxPortDown indicates the number of GSMP 'PortDown' messages that were transmitted to the ANCP neighbor in this session.
ancpPortUpReceived	long	tmnxAncpSesStatRxPortUp	The value of tmnxAncpSesStatRxPortUp indicates the number of GSMP 'PortUp' messages received in this ANCP session.
ancpPortUpTransmitted	long	tmnxAncpSesStatTxPortUp	The value of tmnxAncpSesStatTxPortUp indicates the number of GSMP 'PortUp' messages that were transmitted to the ANCP neighbor in this session.
ancpRstAckReceived	long	tmnxAncpSesStatRxRstAck	The value of tmnxAncpSesStatRxRstAck indicates the number of GSMP RST ACK messages received in this ANCP session.
ancpRstAckTransmitted	long	tmnxAncpSesStatTxRstAck	The value of tmnxAncpSesStatTxRstAck indicates the number of GSMP RST ACK messages that were transmitted to the ANCP neighbor in this session.
ancpSynAckReceived	long	tmnxAncpSesStatRxSynAck	The value of tmnxAncpSesStatRxSynAck indicates the number of GSMP SYN ACK messages received in this ANCP session.
ancpSynAckTransmitted	long	tmnxAncpSesStatTxSynAck	The value of tmnxAncpSesStatTxSynAck indicates the number of GSMP SYN ACK messages that were transmitted to the ANCP neighbor in this ANCP session.
ancpSynReceived	long	tmnxAncpSesStatRxSyn	The value of tmnxAncpSesStatRxSyn indicates the number of GSMP SYN messages received in this ANCP session.
ancpSynTransmitted	long	tmnxAncpSesStatTxSyn	The value of tmnxAncpSesStatTxSyn indicates the number of GSMP SYN messages that were transmitted to the ANCP neighbor in this ANCP session.
ancpTransmittedDropped	long	tmnxAncpSesStatTxDrop	The value of tmnxAncpSesStatTxDrop indicates the number of GSMP protocol messages that were created by the system in order for them to be sent to the ACNP neighbor, but were never transmitted.

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Table H-12 igmp statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: TIMETRA-IGMP-MIB.vRtrIgmpIfStatsTable Monitored class: igmp.Interface			

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5620 SAM counter name	Type	MIB counter name	Description
importPolicyDrops	long	vRtrIgmpIfImportPolicyDrops	The value of vRtrIgmpIfImportPolicyDrops indicates the total number of times IGMP protocol instance matched the host IP address or group/source addresses specified in the import policy vRtrIgmpIfImportPolicy.
mcacPolicyDrops	long	vRtrIgmpIfStatsMcacPolicyDrops	The value of the object vRtrIgmpIfStatsMcacPolicyDrops indicates the number times an IGMP Group is dropped because of applying a multicast CAC policy on this interface.
rxBadChecksumPkts	long	vRtrIgmpIfRxBadChecksumPkts	The value of vRtrIgmpIfRxBadChecksumPkts indicates the total number of IGMP packets with bad checksum received on this interface.
rxBadEncodings	long	vRtrIgmpIfRxBadEncodings	The value of vRtrIgmpIfRxBadEncodings indicates the total number of IGMP packets received on this interface which were not encoded correctly.
rxBadLenPkts	long	vRtrIgmpIfRxBadLenPkts	The value of vRtrIgmpIfRxBadLenPkts indicates the total number of IGMP packets with bad length received on this interface.
rxBadReceiveIfPkts	long	vRtrIgmpIfRxBadReceiveIfPkts	The value of vRtrIgmpIfRxBadReceiveIfPkts indicates the total number of IGMP packets incorrectly received on this interface.
rxGenQueries	long	vRtrIgmpIfRxGenQueries	The value of vRtrIgmpIfRxGenQueries indicates the total number of IGMP General Queries received on this interface.
rxGrpQueries	long	vRtrIgmpIfRxGrpQueries	The value of vRtrIgmpIfRxGrpQueries indicates the number of IGMP Group Specific Queries received on this interface.
rxGrpSrcQueries	long	vRtrIgmpIfRxGrpSrcQueries	The value of vRtrIgmpIfRxGrpSrcQueries indicates the number of IGMP Group and Source Specific Queries received on this interface.
rxLeaves	long	vRtrIgmpIfRxLeaves	The value of vRtrIgmpIfRxLeaves indicates the total number of IGMP V2 Leaves received on this interface.
rxNonLocal	long	vRtrIgmpIfRxNonLocal	The value of vRtrIgmpIfRxNonLocal indicates the total number of IGMP packets received from a non-local sender.
rxNoRtrAlertPkts	long	vRtrIgmpIfRxNoRtrAlertPkts	The value of vRtrIgmpIfRxNoRtrAlertPkts indicates the total number of IGMPv3 packets received on this interface which did not have the router alert flag set.
rxPktDrops	long	vRtrIgmpIfRxPktDrops	The value of vRtrIgmpIfRxPktDrops indicates the total number of IGMP packets that were received on this interface but were dropped.

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5620 SAM counter name	Type	MIB counter name	Description
rxUnknownTypePkts	long	vRtrIgmpIfRxUnknownTypePkts	The value of vRtrIgmpIfRxUnknownTypePkts indicates the total number of IGMP packets with unknown type received on this interface.
rxV1Reports	long	vRtrIgmpIfRxV1Reports	The value of vRtrIgmpIfRxV1Reports indicates the total number of IGMP V1 Reports received on this interface.
rxV2Reports	long	vRtrIgmpIfRxV2Reports	The value of vRtrIgmpIfRxV2Reports indicates the total number of IGMP V2 Reports received on this interface.
rxV3Reports	long	vRtrIgmpIfRxV3Reports	The value of vRtrIgmpIfRxV3Reports indicates the total number of IGMP V3 Reports received on this interface.
rxWrongVersions	long	vRtrIgmpIfRxWrongVersions	The value of vRtrIgmpIfRxWrongVersions indicates the total number of IGMP packets with wrong versions received on this interface.
statsSGTypes	long	vRtrIgmpIfStatsSGTypes	The value of vRtrIgmpIfStatsSGTypes indicates the number of entries on this interface for which the source type is 'sg'.
statsStarGTypes	long	vRtrIgmpIfStatsStarGTypes	vRtrIgmpIfStatsStarGTypes indicates the number of entries on this interface for which the source type is 'starG'.
txErrors	long	vRtrIgmpIfTxErrors	The value of vRtrIgmpIfTxErrors indicates the total number of times there was an error transmitting IGMP packets on this interface..
txGenQueries	long	vRtrIgmpIfTxGenQueries	The value of vRtrIgmpIfTxGenQueries indicates the number of IGMP General Queries transmitted on this interface.
txGrpQueries	long	vRtrIgmpIfTxGrpQueries	The value of vRtrIgmpIfTxGrpQueries indicates the number of IGMP Group Specific Queries transmitted on this interface.
txGrpSrcQueries	long	vRtrIgmpIfTxGrpSrcQueries	The value of vRtrIgmpIfTxGrpSrcQueries indicates the number of IGMP Group and Source Specific Queries transmitted on this interface.
txLeaves	long	vRtrIgmpIfTxLeaves	The value of vRtrIgmpIfTxLeaves indicates the total number of IGMP Leaves transmitted on this interface.
txV1Reports	long	vRtrIgmpIfTxV1Reports	The value of vRtrIgmpIfTxV1Reports indicates the total number of IGMP V1 Reports transmitted on this interface.
txV2Reports	long	vRtrIgmpIfTxV2Reports	The value of vRtrIgmpIfTxV2Reports indicates the total number of IGMP V2 Reports transmitted on this interface.
txV3Reports	long	vRtrIgmpIfTxV3Reports	The value of vRtrIgmpIfTxV3Reports indicates the total number of IGMP V3 Reports transmitted on this interface.
InterfaceStatsExtension MIB table name: TIMETRA-IGMP-MIB.vRtrIgmpIfStatsTable Monitored class: igmp.Interface			

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5620 SAM counter name	Type	MIB counter name	Description
rxLocalScopePkts	long	vRtrIgmpIfRxLocalScopePkts	The value of the object vRtrIgmpIfRxLocalScopePkts indicates the number of IGMP packets received on the link-local scope IPv4 multicast address.
rxRsvdScopePkts	long	vRtrIgmpIfRxRsvdScopePkts	The value of the object vRtrIgmpIfRxRsvdScopePkts indicates the number of IGMP packets received on the reserved scope IPv4 multicast address.

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Table H-13 isis statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceLevelOneReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelOneSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).

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5620 SAM counter name	Type	MIB counter name	Description
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
LinkStatePduSiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			
csnpDropped	long	vRtrIsisCSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisCSNPDrop.
csnpReceived	long	vRtrIsisCSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisCSNPRecd.
csnpRetransmitted	long	vRtrIsisCSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisCSNPRetrans.
csnpSent	long	vRtrIsisCSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisCSNPSent.
helloDropped	long	vRtrIsisIIHDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisIIHDrop.
helloReceived	long	vRtrIsisIIHRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisIIHRecd.
helloRetransmitted	long	vRtrIsisIIHRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisIIHRetrans.

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5620 SAM counter name	Type	MIB counter name	Description
helloSent	long	vRtrIsisIIHSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisIIHSent.
lspDropped	long	vRtrIsisLSPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisLSPDrop.
lspReceived	long	vRtrIsisLSPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisLSPRecd.
lspRetransmitted	long	vRtrIsisLSPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisLSPRetrans.
lspSent	long	vRtrIsisLSPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisLSPSent.
psnpDropped	long	vRtrIsisPSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisPSNPDrop.
psnpReceived	long	vRtrIsisPSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisPSNPRecd.
psnpRetransmitted	long	vRtrIsisPSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisPSNPRetrans.
psnpSent	long	vRtrIsisPSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisPSNPSent.
unknownDropped	long	vRtrIsisUnknownDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisUnknownDrop.
unknownReceived	long	vRtrIsisUnknownRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisUnknownRecd.
unknownRetransmitted	long	vRtrIsisUnknownRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisUnknownRetrans.
unknownSent	long	vRtrIsisUnknownSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisUnknownSent.
SiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			
cspfDroppedRequests	long	vRtrIsisCSPFDroppedRequests	vRtrIsisCSPFDroppedRequests maintains the number of dropped CSPF requests by the protocol.
cspfPathsFound	long	vRtrIsisCSPFPathsFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which paths satisfying the constraints were found.

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5620 SAM counter name	Type	MIB counter name	Description
cspfPathsNotFound	long	vRtrIsisCSPFPathsNotFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which no paths satisfying the constraints were found.
cspfRequests	long	vRtrIsisCSPFRequests	vRtrIsisCSPFRequests maintains the number of CSPF requests made to the protocol.
initiatedPurges	long	vRtrIsisInitiatedPurges	The value of vRtrIsisInitiatedPurges counts the number of times purges have been initiated.
lspRegenerations	long	vRtrIsisLSPRegenerations	The value of vRtrIsisLSPRegenerations maintains the count of LSP regenerations.
spfRuns	long	vRtrIsisSpfRuns	The value of vRtrIsisSpfRuns indicates the number of times shortest path first calculations have been made.

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Table H-14 l2fib statistics

5620 SAM counter name	Type	MIB counter name	Description
MFibGrpSrcStats MIB table name: TIMETRA-SERV-MIB.tlsMFibStatsTable Monitored class: l2fib.MFibGrpSrc			
forwardedOctets	UINT128	tlsMFibStatsForwardedOctets	The value of tlsMFibStatsForwardedOctets indicates the number of octets that were forwarded to the SAPs and SDPs listed in the tlsMFibInfoTable.
forwardedPkts	UINT128	tlsMFibStatsForwardedPkts	The value of tlsMFibStatsForwardedPkts indicates the number of multicast packets that were forwarded to the SAPs and SDPs listed in the tlsMFibInfoTable.

Table H-15 l2fwd statistics

5620 SAM counter name	Type	MIB counter name	Description
AccessInterfaceStpStats MIB table name: TIMETRA-SAP-MIB.sapTlsInfoTable Monitored class: l2fwd.AccessInterfaceStp			
forwardTransitions	long	sapTlsStpForwardTransitions	The value of the object sapTlsStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.
inBadBpdus	long	sapTlsStpInBadBpdus	This object specifies the number of bad BPDUs received on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
inConfigBpdus	long	sapTlsStpInConfigBpdus	The value of the object sapTlsStpInConfigBpdus indicates the number of Configuration BPDUs received on this SAP.
inMultipleSpanningTreeBpdus	long	sapTlsStpInMstBpdus	The value of the object sapTlsStpInMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs received on this SAP.
inRapidSpanningTreeBpdus	long	sapTlsStpInRstBpdus	The value of the object sapTlsStpInRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs received on this SAP.
inTcnBpdus	long	sapTlsStpInTcnBpdus	The value of the object sapTlsStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this SAP.
outConfigBpdus	long	sapTlsStpOutConfigBpdus	The value of the object sapTlsStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this SAP.
outMultipleSpanningTreeBpdus	long	sapTlsStpOutMstBpdus	The value of the object sapTlsStpOutMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs sent out on this SAP.
outRapidSpanningTreeBpdus	long	sapTlsStpOutRstBpdus	The value of the object sapTlsStpOutRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs sent out on this SAP.
outTcnBpdus	long	sapTlsStpOutTcnBpdus	This object specifies the number of Topology Change Notification BPDUs sent out this SAP.
CircuitMrpInfoStats MIB table name: TIMETRA-SDP-MIB.sdpBindTlsMrpTable Monitored class: l2fwd.CircuitMrpInfo			
mrpDroppedPdus	long	sdpBindTlsMrpDroppedPdus	The value of sdpBindTlsMrpDroppedPdus indicates the number of dropped MRP packets on this SDP Bind.
mrpRxEmptyEvent	long	sdpBindTlsMrpRxEmptyEvent	The value of sdpBindTlsMrpRxEmptyEvent indicates the number of 'Empty' MRP events received on this SDP Bind.
mrpRxInEvent	long	sdpBindTlsMrpRxInEvent	The value of sdpBindTlsMrpRxInEvent indicates the number of 'In' MRP events received on this SDP Bind.
mrpRxJoinEmptyEvent	long	sdpBindTlsMrpRxJoinEmptyEvent	The value of sdpBindTlsMrpRxJoinEmptyEvent indicates the number of 'Join Empty' MRP events received on this SDP Bind.
mrpRxJoinInEvent	long	sdpBindTlsMrpRxJoinInEvent	The value of sdpBindTlsMrpRxJoinInEvent indicates the number of 'Join-In' MRP events received on this SDP Bind.
mrpRxLeaveEvent	long	sdpBindTlsMrpRxLeaveEvent	The value of sdpBindTlsMrpRxLeaveEvent indicates the number of 'Leave' MRP events received on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
mrpRxNewEvent	long	sdpBindTlsMrpRxNewEvent	The value of sdpBindTlsMrpRxNewEvent indicates the number of 'New' MRP events received on this SDP Bind.
mrpRxPdus	long	sdpBindTlsMrpRxPdus	The value of sdpBindTlsMrpRxPdus indicates the number of MRP packets received on this SDP Bind.
mrpTxEmptyEvent	long	sdpBindTlsMrpTxEmptyEvent	The value of sdpBindTlsMrpTxEmptyEvent indicates the number of 'Empty' MRP events transmitted on this SDP Bind.
mrpTxInEvent	long	sdpBindTlsMrpTxInEvent	The value of sdpBindTlsMrpTxInEvent indicates the number of 'In' MRP events transmitted on this SDP Bind.
mrpTxJoinEmptyEvent	long	sdpBindTlsMrpTxJoinEmptyEvent	The value of sdpBindTlsMrpTxJoinEmptyEvent indicates the number of 'Join Empty' MRP events transmitted on this SDP Bind.
mrpTxJoinInEvent	long	sdpBindTlsMrpTxJoinInEvent	The value of sdpBindTlsMrpTxJoinInEvent indicates the number of 'Join-In' MRP events transmitted on this SDP Bind.
mrpTxLeaveEvent	long	sdpBindTlsMrpTxLeaveEvent	The value of sdpBindTlsMrpTxLeaveEvent indicates the number of 'Leave' MRP events transmitted on this SDP Bind.
mrpTxNewEvent	long	sdpBindTlsMrpTxNewEvent	The value of sdpBindTlsMrpTxNewEvent indicates the number of 'New' MRP events transmitted on this SDP Bind.
mrpTxPdus	long	sdpBindTlsMrpTxPdus	The value of sdpBindTlsMrpTxPdus indicates the number of MRP packets transmitted on this SDP Bind.
CircuitStpStats MIB table name: TIMETRA-SDP-MIB.sdpBindTlsTable Monitored class: l2fwd.CircuitStp			
forwardTransitions	long	sdpBindTlsStpForwardTransitions	The value of the object sdpBindTlsStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.
inBadBpdus	long	sdpBindTlsStpInBadBpdus	The value of the object sdpBindTlsStpInBadBpdus indicates the number of bad BPDUs received on this SDP Bind.
inConfigBpdus	long	sdpBindTlsStpInConfigBpdus	The value of the object sdpBindTlsStpInConfigBpdus indicates the number of Configuration BPDUs received on this SDP Bind.
inRapidSpanningTreeBpdus	long	sdpBindTlsStpInRstBpdus	The value of the object sdpBindTlsStpInRstBpdus indicates the number of Rapid Spanning Tree (Rst) BPDUs received on this SDP.
inTcnBpdus	long	sdpBindTlsStpInTcnBpdus	The value of the object sdpBindTlsStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
outConfigBpdus	long	sdpBindTlsStpOutConfigBpdus	The value of the object sdpBindTlsStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this SDP Bind.
outRapidSpanningTreeBpdus	long	sdpBindTlsStpOutRstBpdus	The value of the object sdpBindTlsStpOutRstBpdus indicates the number of Rapid Spanning Tree (Rstp) BPDUs sent out on this SDP.
outTcnBpdus	long	sdpBindTlsStpOutTcnBpdus	The value of the object sdpBindTlsStpOutTcnBpdus indicates the number of Topology Change Notification BPDUs sent out this SDP Bind.
L2AccessInterfaceMrpInfoStats MIB table name: TIMETRA-SAP-MIB.sapTlsMrpTable Monitored class: l2fwd.L2AccessInterfaceMrpInfo			
mrpDroppedPdus	long	sapTlsMrpDroppedPdus	The value of sapTlsMrpDroppedPdus indicates the number of dropped MRP packets on this SAP.
mrpRxEmptyEvent	long	sapTlsMrpRxEmptyEvent	The value of sapTlsMrpRxEmptyEvent indicates the number of 'Empty' MRP events received on this SAP.
mrpRxInEvent	long	sapTlsMrpRxInEvent	The value of sapTlsMrpRxInEvent indicates the number of 'In' MRP events received on this SAP.
mrpRxJoinEmptyEvent	long	sapTlsMrpRxJoinEmptyEvent	The value of sapTlsMrpRxJoinEmptyEvent indicates the number of 'Join Empty' MRP events received on this SAP.
mrpRxJoinInEvent	long	sapTlsMrpRxJoinInEvent	The value of sapTlsMrpRxJoinInEvent indicates the number of 'Join-In' MRP events received on this SAP.
mrpRxLeaveEvent	long	sapTlsMrpRxLeaveEvent	The value of sapTlsMrpRxLeaveEvent indicates the number of 'Leave' MRP events received on this SAP.
mrpRxNewEvent	long	sapTlsMrpRxNewEvent	The value of sapTlsMrpRxNewEvent indicates the number of 'New' MRP events received on this SAP.
mrpRxPdus	long	sapTlsMrpRxPdus	The value of sapTlsMrpRxPdus indicates the number of MRP packets received on this SAP.
mrpTxEmptyEvent	long	sapTlsMrpTxEmptyEvent	The value of sapTlsMrpTxEmptyEvent indicates the number of 'Empty' MRP events transmitted on this SAP.
mrpTxInEvent	long	sapTlsMrpTxInEvent	The value of sapTlsMrpTxInEvent indicates the number of 'In' MRP events transmitted on this SAP.
mrpTxJoinEmptyEvent	long	sapTlsMrpTxJoinEmptyEvent	The value of sapTlsMrpTxJoinEmptyEvent indicates the number of 'Join Empty' MRP events transmitted on this SAP.
mrpTxJoinInEvent	long	sapTlsMrpTxJoinInEvent	The value of sapTlsMrpTxJoinInEvent indicates the number of 'Join-In' MRP events transmitted on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
mrpTxLeaveEvent	long	sapTlsMrpTxLeaveEvent	The value of sapTlsMrpTxLeaveEvent indicates the number of 'Leave' MRP events transmitted on this SAP.
mrpTxNewEvent	long	sapTlsMrpTxNewEvent	The value of sapTlsMrpTxNewEvent indicates the number of 'New' MRP events transmitted on this SAP.
mrpTxPdus	long	sapTlsMrpTxPdus	The value of sapTlsMrpTxPdus indicates the number of MRP packets transmitted on this SAP.
PipStpInfoStats MIB table name: TIMETRA-SERV-MIB.tlsPipInfoTable Monitored class: l2fwd.PipStpInfo			
pipStpForwardTransitions	long	tlsPipStpForwardTransitions	The value of the object tlsPipStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.
pipStpInBadBpdus	long	tlsPipStpInBadBpdus	This object specifies the number of bad BPDUs received on this PIP uplink.
pipStpInConfigBpdus	long	tlsPipStpInConfigBpdus	The value of the object tlsPipStpInConfigBpdus indicates the number of Configuration BPDUs received on this PIP uplink.
pipStpInMstBpdus	long	tlsPipStpInMstBpdus	The value of the object tlsPipStpInMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs received on this PIP uplink.
pipStpInRstBpdus	long	tlsPipStpInRstBpdus	The value of the object tlsPipStpInRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs received on this PIP uplink.
pipStpInTcnBpdus	long	tlsPipStpInTcnBpdus	The value of the object tlsPipStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this PIP uplink.
pipStpOutConfigBpdus	long	tlsPipStpOutConfigBpdus	The value of the object tlsPipStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this PIP uplink.
pipStpOutMstBpdus	long	tlsPipStpOutMstBpdus	The value of the object tlsPipStpOutMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs sent out on this PIP uplink.
pipStpOutRstBpdus	long	tlsPipStpOutRstBpdus	The value of the object tlsPipStpOutRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs sent out on this PIP uplink.
pipStpOutTcnBpdus	long	tlsPipStpOutTcnBpdus	This object specifies the number of Topology Change Notification BPDUs sent out this PIP uplink.
SiteFibStats MIB table name: TIMETRA-SERV-MIB.svcTlsInfoTable Monitored class: l2fwd.SiteFib			

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5620 SAM counter name	Type	MIB counter name	Description
entries	long	svcTlsFdbNumEntries	The value of the object svcTlsFdbNumEntries indicates the current number of entries in the FDB of this service.
provisionedSize	long	svcTlsFdbTableSize	The value of the object svcTlsFdbTableSize specifies the maximum number of learned and static entries allowed in the FDB of this service. The maximum value of svcTlsFdbTableSize is '511999', when the the value of TIMETRA-CHASSIS-MIB::tmnxChassisOperMode is 'd'. The maximum value of svcTlsFdbTableSize is '196607', when the the value of TIMETRA-CHASSIS-MIB::tmnxChassisOperMode is 'c'. In other cases, the maximum value of svcTlsFdbTableSize is '131071'. DEFVAL { 250 }.
staticEntries	long	svcTlsFdbNumStaticEntries	The value of the object svcTlsFdbNumStaticEntries indicates the current number of static entries in the FDB of this service.
SiteStpStats MIB table name: TIMETRA-SERV-MIB.svcTlsInfoTable Monitored class: l2fwd.SiteStp			
timeSinceTopologyChange	long	svcTlsStpTimeSinceTopologyChange	The value of the object svcTlsStpTimeSinceTopologyChange indicates the time (in hundredths of a second) since the last time a topology change was detected by the Spanning Tree Protocol instance associated with this service.
topologyChanges	long	svcTlsStpTopologyChanges	The value of the object svcTlsStpTopologyChanges indicates the total number of topology changes detected by the Spanning Tree Protocol instance associated with this service since the management entity was last reset or initialized.

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Table H-16 lag statistics

5620 SAM counter name	Type	MIB counter name	Description
LagStats MIB table name: TIMETRA-LAG-MIB.tLagOperationTable Monitored class: lag.Interface			
portThresholdFalling	long	tLagPortThresholdFalling	counts the number of linkDown or dynamicCost events for the Link Aggregation Group caused by the number of physical ports being less than or equal to tLagPortThreshold value.

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5620 SAM counter name	Type	MIB counter name	Description
portThresholdRising	long	tLagPortThresholdRising	counts the number of linkUp or dynamicCost events for the Link Aggregation Group caused by the number of physical ports being greater than tLagPortThreshold value.
MultiChassisLagMemberStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcLagLagStatsTable Monitored classes: • lag.MultiChassisLagMember • multichassis.MultiChassisLagMember			
configPacketsReceived	long	tmnxMcLagLagStatsPktsRxConfig	The value of tmnxMcLagLagStatsPktsRxConfig indicates how many MC-Lag control packets of type lag config were received on this system from the peer for this lag.
configPacketsTransmitted	long	tmnxMcLagLagStatsPktsTxConfig	The value of tmnxMcLagLagStatsPktsTxConfig indicates how many MC-Lag control packets of type lag config were sent on this system to the peer for this lag.
failedPacketsTransmitted	long	tmnxMcLagLagStatsPktsTxFailed	The value of tmnxMcLagLagStatsPktsTxFailed indicates how many MC-Lag control packets failed to be transmitted on this system to the peer for this lag.
statePacketsReceived	long	tmnxMcLagLagStatsPktsRxState	The value of tmnxMcLagLagStatsPktsRxState indicates how many MC-Lag control packets of type lag state were received on this system from the peer for this lag.
statePacketsTransmitted	long	tmnxMcLagLagStatsPktsTxState	The value of tmnxMcLagLagStatsPktsTxState indicates how many MC-Lag control packets of type lag state were sent on this system to the peer for this lag.

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Table H-17 ldp statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpIfStatsTable Monitored class: ldp.Interface			
existingAdjacencies	long	vRtrLdpIfExistingAdjacencies	The value of vRtrLdpIfExistingAdjacencies gives a count of the total active adjacencies on this LDP interface or with this targeted peer.
LdpEgressStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpEgrStatisticsTable Monitored class: ldp.AccountingFecPrefix			

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5620 SAM counter name	Type	MIB counter name	Description
ldpInProfileOctetsFc0	UINT128	vRtrLdpInProfileOctetsFc0	The value of vRtrLdpInProfileOctetsFc0 indicates the number of in profile octets received for Forwarding Class 0.
ldpInProfileOctetsFc1	UINT128	vRtrLdpInProfileOctetsFc1	The value of vRtrLdpInProfileOctetsFc1 indicates the number of in profile octets received for Forwarding Class 1.
ldpInProfileOctetsFc2	UINT128	vRtrLdpInProfileOctetsFc2	The value of vRtrLdpInProfileOctetsFc2 indicates the number of in profile octets received for Forwarding Class 2.
ldpInProfileOctetsFc3	UINT128	vRtrLdpInProfileOctetsFc3	The value of vRtrLdpInProfileOctetsFc3 indicates the number of in profile octets received for Forwarding Class 3.
ldpInProfileOctetsFc4	UINT128	vRtrLdpInProfileOctetsFc4	The value of vRtrLdpInProfileOctetsFc4 indicates the number of in profile octets received for Forwarding Class 4.
ldpInProfileOctetsFc5	UINT128	vRtrLdpInProfileOctetsFc5	The value of vRtrLdpInProfileOctetsFc5 indicates the number of in profile octets received for Forwarding Class 5.
ldpInProfileOctetsFc6	UINT128	vRtrLdpInProfileOctetsFc6	The value of vRtrLdpInProfileOctetsFc6 indicates the number of in profile octets received for Forwarding Class 6.
ldpInProfileOctetsFc7	UINT128	vRtrLdpInProfileOctetsFc7	The value of vRtrLdpInProfileOctetsFc7 indicates the number of in profile octets received for Forwarding Class 7.
ldpInProfilePktsFc0	UINT128	vRtrLdpInProfilePktsFc0	The value of vRtrLdpInProfilePktsFc0 indicates the number of in profile packets received for Forwarding Class 0.
ldpInProfilePktsFc1	UINT128	vRtrLdpInProfilePktsFc1	The value of vRtrLdpInProfilePktsFc1 indicates the number of in profile packets received for Forwarding Class 1.
ldpInProfilePktsFc2	UINT128	vRtrLdpInProfilePktsFc2	The value of vRtrLdpInProfilePktsFc2 indicates the number of in profile packets received for Forwarding Class 2.
ldpInProfilePktsFc3	UINT128	vRtrLdpInProfilePktsFc3	The value of vRtrLdpInProfilePktsFc3 indicates the number of in profile packets received for Forwarding Class 3.
ldpInProfilePktsFc4	UINT128	vRtrLdpInProfilePktsFc4	The value of vRtrLdpInProfilePktsFc4 indicates the number of in profile packets received for Forwarding Class 4.
ldpInProfilePktsFc5	UINT128	vRtrLdpInProfilePktsFc5	The value of vRtrLdpInProfilePktsFc5 indicates the number of in profile packets received for Forwarding Class 5.
ldpInProfilePktsFc6	UINT128	vRtrLdpInProfilePktsFc6	The value of vRtrLdpInProfilePktsFc6 indicates the number of in profile packets received for Forwarding Class 6.
ldpInProfilePktsFc7	UINT128	vRtrLdpInProfilePktsFc7	The value of vRtrLdpInProfilePktsFc7 indicates the number of in profile packets received for Forwarding Class 7.
ldpOutOfProfOctetsFc0	UINT128	vRtrLdpOutOfProfOctetsFc0	The value of vRtrLdpOutOfProfOctetsFc0 indicates the number of out of profile octets received for Forwarding Class 0.

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5620 SAM counter name	Type	MIB counter name	Description
ldpOutOfProfOctetsFc1	UINT128	vRtrLdpOutOfProfOctetsFc1	The value of vRtrLdpOutOfProfOctetsFc1 indicates the number of out of profile octets received for Forwarding Class 1.
ldpOutOfProfOctetsFc2	UINT128	vRtrLdpOutOfProfOctetsFc2	The value of vRtrLdpOutOfProfOctetsFc2 indicates the number of out of profile octets received for Forwarding Class 2.
ldpOutOfProfOctetsFc3	UINT128	vRtrLdpOutOfProfOctetsFc3	The value of vRtrLdpOutOfProfOctetsFc3 indicates the number of out of profile octets received for Forwarding Class 3.
ldpOutOfProfOctetsFc4	UINT128	vRtrLdpOutOfProfOctetsFc4	The value of vRtrLdpOutOfProfOctetsFc4 indicates the number of out of profile octets received for Forwarding Class 4.
ldpOutOfProfOctetsFc5	UINT128	vRtrLdpOutOfProfOctetsFc5	The value of vRtrLdpOutOfProfOctetsFc5 indicates the number of out of profile octets received for Forwarding Class 5.
ldpOutOfProfOctetsFc6	UINT128	vRtrLdpOutOfProfOctetsFc6	The value of vRtrLdpOutOfProfOctetsFc6 indicates the number of out of profile octets received for Forwarding Class 6.
ldpOutOfProfOctetsFc7	UINT128	vRtrLdpOutOfProfOctetsFc7	The value of vRtrLdpOutOfProfOctetsFc7 indicates the number of out of profile octets received for Forwarding Class 7.
ldpOutOfProfPktsFc0	UINT128	vRtrLdpOutOfProfPktsFc0	The value of vRtrLdpOutOfProfPktsFc0 indicates the number of out of profile packets received for Forwarding Class 0.
ldpOutOfProfPktsFc1	UINT128	vRtrLdpOutOfProfPktsFc1	The value of vRtrLdpOutOfProfPktsFc1 indicates the number of out of profile packets received for Forwarding Class 1.
ldpOutOfProfPktsFc2	UINT128	vRtrLdpOutOfProfPktsFc2	The value of vRtrLdpOutOfProfPktsFc2 indicates the number of out of profile packets received for Forwarding Class 2.
ldpOutOfProfPktsFc3	UINT128	vRtrLdpOutOfProfPktsFc3	The value of vRtrLdpOutOfProfPktsFc3 indicates the number of out of profile packets received for Forwarding Class 3.
ldpOutOfProfPktsFc4	UINT128	vRtrLdpOutOfProfPktsFc4	The value of vRtrLdpOutOfProfPktsFc4 indicates the number of out of profile packets received for Forwarding Class 4.
ldpOutOfProfPktsFc5	UINT128	vRtrLdpOutOfProfPktsFc5	The value of vRtrLdpOutOfProfPktsFc5 indicates the number of out of profile packets received for Forwarding Class 5.
ldpOutOfProfPktsFc6	UINT128	vRtrLdpOutOfProfPktsFc6	The value of vRtrLdpOutOfProfPktsFc6 indicates the number of out of profile packets received for Forwarding Class 6.
ldpOutOfProfPktsFc7	UINT128	vRtrLdpOutOfProfPktsFc7	The value of vRtrLdpOutOfProfPktsFc7 indicates the number of out of profile packets received for Forwarding Class 7.
SessionStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpSessionStatsTable Monitored class: ldp.Session			
addressMessagesReceived	long	vRtrLdpSessStatsAddrIn	The value of vRtrLdpSessStatsAddrIn counts the number of Address Messages that have been received during this session.

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5620 SAM counter name	Type	MIB counter name	Description
addressMessagesSent	long	vRtrLdpSessStatsAddrOut	The value of vRtrLdpSessStatsAddrOut counts the number of Address Messages that have been sent during this session.
addressWithdrawMessagesReceived	long	vRtrLdpSessStatsAddrWithdrawIn	The value of vRtrLdpSessStatsAddrWithdrawIn counts the number of Address Withdraw Messages that have been received during this session.
addressWithdrawMessagesSent	long	vRtrLdpSessStatsAddrWithdrawOut	The value of vRtrLdpSessStatsAddrWithdrawOut counts the number of Address Withdraw Messages that have been sent during this session.
fecReceived	long	vRtrLdpSessStatsFECRecv	The value of vRtrLdpSessStatsFECRecv counts the number of FECs received for this session.
fecSent	long	vRtrLdpSessStatsFECSent	The value of vRtrLdpSessStatsFECSent counts the number of FECs sent for this session.
helloMessagesReceived	long	vRtrLdpSessStatsHelloIn	The value of vRtrLdpSessStatsHelloIn counts the number of Hello Messages that have been received during this session.
helloMessagesSent	long	vRtrLdpSessStatsHelloOut	The value of vRtrLdpSessStatsHelloOut counts the number of Hello Messages that have been sent during this session.
initMessagesReceived	long	vRtrLdpSessStatsInitIn	The value of vRtrLdpSessStatsInitIn counts the number of Init Messages that have been received during this session.
initMessagesSent	long	vRtrLdpSessStatsInitOut	The value of vRtrLdpSessStatsInitOut counts the number of Init Messages that have been sent during this session.
keepAliveMessagesReceived	long	vRtrLdpSessStatsKeepaliveIn	The value of vRtrLdpSessStatsKeepaliveIn counts the number of Keepalive Messages that have been received during this session.
keepAliveMessagesSent	long	vRtrLdpSessStatsKeepaliveOut	The value of vRtrLdpSessStatsKeepaliveOut counts the number of Keepalive Messages that have been sent during this session.
labelAbortsReceived	long	vRtrLdpSessStatsLabelAbortIn	The value of vRtrLdpSessStatsLabelAbortIn counts the number of Label Abort Messages that have been received during this session.
labelAbortsSent	long	vRtrLdpSessStatsLabelAbortOut	The value of vRtrLdpSessStatsLabelAbortOut counts the number of Label Abort Messages that have been sent during this session.
labelMappingsReceived	long	vRtrLdpSessStatsLabelMappingIn	The value of vRtrLdpSessStatsLabelMappingIn counts the number of Label Mapping Messages that have been received during this session.

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5620 SAM counter name	Type	MIB counter name	Description
labelMappingsSent	long	vRtrLdpSessStatsLabelMappingOut	The value of vRtrLdpSessStatsLabelMappingOut counts the number of Label Mapping Messages that have been sent during this session.
labelReleasesReceived	long	vRtrLdpSessStatsLabelReleaseIn	The value of vRtrLdpSessStatsLabelReleaseIn counts the number of Label Release Messages that have been received during this session.
labelReleasesSent	long	vRtrLdpSessStatsLabelReleaseOut	The value of vRtrLdpSessStatsLabelReleaseOut counts the number of Label Release Messages that have been sent during this session.
labelRequestsReceived	long	vRtrLdpSessStatsLabelRequestIn	The value of vRtrLdpSessStatsLabelRequestIn counts the number of Label Request Messages that have been received during this session.
labelRequestsSent	long	vRtrLdpSessStatsLabelRequestOut	The value of vRtrLdpSessStatsLabelRequestOut counts the number of Label Request Messages that have been sent during this session.
labelWithdrawsReceived	long	vRtrLdpSessStatsLabelWithdrawIn	The value of vRtrLdpSessStatsLabelWithdrawIn counts the number of Label Withdraw Messages that have been received during this session.
labelWithdrawsSent	long	vRtrLdpSessStatsLabelWithdrawOut	The value of vRtrLdpSessStatsLabelWithdrawOut counts the number of Label Withdraw Messages that have been sent during this session.
linkAdjacencies	long	vRtrLdpSessStatsLinkAdj	The value of vRtrLdpSessStatsLinkAdj specifies the number of link adjacencies for this session.
notificationMessagesReceived	long	vRtrLdpSessStatsNotificationIn	The value of vRtrLdpSessStatsNotificationIn counts the number of Notification Messages that have been received during this session.
notificationMessagesSent	long	vRtrLdpSessStatsNotificationOut	The value of vRtrLdpSessStatsNotificationOut counts the number of Notification Messages that have been sent during this session.
targetedAdjacencies	long	vRtrLdpSessStatsTargAdj	The value of vRtrLdpSessStatsTargAdj specifies the number of targeted adjacencies for this session.
SiteStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpStatsTable Monitored class: ldp.Site			
activeAdjacencies	long	vRtrLdpStatsActiveAdjacencies	The value of vRtrLdpStatsActiveAdjacencies specifies the number of active adjacencies (i.e. established sessions) associated with the LDP instance.

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5620 SAM counter name	Type	MIB counter name	Description
activeInterfaces	long	vRtrLdpStatsActiveInterfaces	The value of vRtrLdpStatsActiveInterfaces specifies the number of active (i.e. operationally up) interfaces associated with the LDP instance.
activeSessions	long	vRtrLdpStatsActiveSessions	The value of vRtrLdpStatsActiveSessions specifies the number of active sessions (i.e. session in some form of creation) associated with the LDP instance.
activeTargetedSessions	long	vRtrLdpStatsActiveTargSessions	The value of vRtrLdpStatsActiveTargSessions specifies the number of active (i.e. operationally up) targeted sessions associated with the LDP instance.
addressFECsReceived	long	vRtrLdpStatsAddrFECRecv	The value of vRtrLdpStatsAddrFECRecv specifies the number of Address FECs received by the LDP instance from its neighbors.
addressFECsSent	long	vRtrLdpStatsAddrFECSent	The value of vRtrLdpStatsAddrFECSent specifies the number of Address FECs sent by the LDP instance to its neighbors.
attemptedSessions	long	vRtrLdpStatsAttemptedSessions	The value of vRtrLdpStatsAttemptedSessions specifies the total number of attempted sessions for this LDP instance.
badLdpIdentifierErrors	long	vRtrLdpStatsBadLdpIdentifierErrors	The value of vRtrLdpStatsBadLdpIdentifierErrors gives the number of Bad LDP Identifier Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badMessageLengthErrors	long	vRtrLdpStatsBadMessageLengthErrors	The value of vRtrLdpStatsBadMessageLengthErrors gives the number of Bad Message Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badPduLengthErrors	long	vRtrLdpStatsBadPduLengthErrors	The value of vRtrLdpStatsBadPduLengthErrors gives the number of Bad Pdu Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badTlvLengthErrors	long	vRtrLdpStatsBadTlvLengthErrors	The value of vRtrLdpStatsBadTlvLengthErrors gives the number of Bad TLV Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
inactiveInterfaces	long	vRtrLdpStatsInactiveInterfaces	The value of vRtrLdpStatsInactiveInterfaces specifies the number of inactive (i.e. operationally down) interfaces associated with the LDP instance.

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5620 SAM counter name	Type	MIB counter name	Description
inactiveTargetedSessions	long	vRtrLdpStatsInactiveTargSessions	The value of vRtrLdpStatsInactiveTargSessions specifies the number of inactive (i.e. operationally down) targeted sessions associated with the LDP instance.
keepAliveExpiredErrors	long	vRtrLdpStatsKeepAliveExpiredErrors	The value of vRtrLdpStatsKeepAliveExpiredErrors gives the number of Session Keep Alive Timer Expired Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
malformedTlvValueErrors	long	vRtrLdpStatsMalformedTlvValueErrors	The value of vRtrLdpStatsMalformedTlvValueErrors gives the number of Malformed TLV Value Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
operDownEvents	long	vRtrLdpStatsOperDownEvents	The value of vRtrLdpStatsOperDownEvents specifies the number of times the LDP instance has gone operationally down since the instance was created.
serviceFECsReceived	long	vRtrLdpStatsSvcFECRecv	The value of vRtrLdpStatsSvcFECRecv specifies the number of Service FECs received by the LDP instance from its neighbors.
serviceFECsSent	long	vRtrLdpStatsSvcFECSent	The value of vRtrLdpStatsSvcFECSent specifies the number of Service FECs sent by the LDP instance to its neighbors.
sessionRejectedAdvertisementModeErrors	long	vRtrLdpStatsSessRejAdvErrors	The value of vRtrLdpStatsSessRejAdvErrors gives the total number of Session Rejected/Parameters Advertisement Mode Error Notification Messages sent or received by this LDP instance.
sessionRejectedLabelRangeErrors	long	vRtrLdpStatsSessRejLabelRangeErrors	The value of vRtrLdpStatsSessRejLabelRangeErrors gives the total number of Session Rejected/Parameters Label Range Error Notification Messages sent or received by this LDP instance.
sessionRejectedMaxPduLengthErrors	long	vRtrLdpStatsSessRejMaxPduErrors	The value of vRtrLdpStatsSessRejMaxPduErrors gives the total number of Session Rejected/Parameters Max Pdu Length Error Notification Messages sent or received by this LDP instance.
sessionRejectedNoHelloErrors	long	vRtrLdpStatsSessRejNoHelloErrors	The value of vRtrLdpStatsSessRejNoHelloErrors gives the total number of Session Rejected/No Hello Error Notification Messages sent or received by this LDP instance.

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5620 SAM counter name	Type	MIB counter name	Description
shutdownNotificationsReceived	long	vRtrLdpStatsShutdownNotifRecv	The value of vRtrLdpStatsShutdownNotifRecv gives the number of Shutdown Notifications received related to sessions associated with this LDP instance.
shutdownNotificationsSent	long	vRtrLdpStatsShutdownNotifSent	The value of vRtrLdpStatsShutdownNotifSent gives the number of Shutdown Notifications sent related to sessions associated with this LDP instance.
TargetedPeerStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpIfStatsTable Monitored class: ldp.TargetedPeer			
existingAdjacencies	long	vRtrLdpIfExistingAdjacencies	The value of vRtrLdpIfExistingAdjacencies gives a count of the total active adjacencies on this LDP interface or with this targeted peer.

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Table H-18 lldp statistics

5620 SAM counter name	Type	MIB counter name	Description
LLDPRxPortStats MIB table name: TIMETRA-LLDP-MIB.tmnxLldpStatsRxPortTable Monitored class: lldp.LLDPPortConfiguration			

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5620 SAM counter name	Type	MIB counter name	Description
lldpStatsRxPortAgeouts	long	tmnxLldpStatsRxPortAgeouts	The counter that represents the number of age-outs that occurred on a given port. An age-out is the number of times the complete set of information advertised by a particular MSAP has been deleted from tables contained in tmnxLldpRemoteSystemsData and lldpExtensions objects because the information timeliness interval has expired. This counter is similar to lldpStatsRemTablesAgeouts, except that the counter is on a per port basis. This enables NMS to poll tables associated with the tmnxLldpRemoteSystemsData objects and all LLDP extension objects associated with remote systems on the indicated port only. This counter should be set to zero during agent initialization and its value should not be saved in non-volatile storage. When a port's admin status changes from 'disabled' to 'rxOnly', 'txOnly' or 'txAndRx', the counter associated with the same port should reset to 0. The agent should also flush all remote system information associated with the same port. This counter should be incremented only once when the complete set of information is invalidated (aged out) from all related tables on a particular port. Partial ageing is not allowed, and thus, should not change the value of this counter. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortFrameDiscard	long	tmnxLldpStatsRxPortFrameDiscard	The number of LLDP frames received by this LLDP agent on the indicated port, and then discarded for any reason. This counter can provide an indication that LLDP header formating problems may exist with the local LLDP agent in the sending system or that LLDPDU validation problems may exist with the local LLDP agent in the receiving system. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortFrameErrs	long	tmnxLldpStatsRxPortFrameErrs	The number of invalid LLDP frames received by this LLDP agent on the indicated port, while this LLDP agent is enabled. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortFrames	long	tmnxLldpStatsRxPortFrames	The number of valid LLDP frames received by this LLDP agent on the indicated port, while this LLDP agent is enabled. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortTLVDiscard	long	tmnxLldpStatsRxPortTLVDiscard	The number of LLDP TLVs discarded for any reason by this LLDP agent on the indicated port. REFERENCE IEEE Std 802.1AB-200X 10.5.2.

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5620 SAM counter name	Type	MIB counter name	Description
lldpStatsRxPortTLVUnknown	long	tmnxLldpStatsRxPortTLVUnknown	The number of LLDP TLVs received on the given port that are not recognized by this LLDP agent on the indicated port. An unrecognized TLV is referred to as the TLV whose type value is in the range of reserved TLV types (000 1001 - 111 1110) in Table 9.1 of IEEE Std 802.1AB-2004. An unrecognized TLV may be a basic management TLV from a later LLDP version. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
LLDPTxPortStats MIB table name: TIMETRA-LLDP-MIB.tmnxLldpStatsTxPortTable Monitored class: lldp.LLDPPortConfiguration			
lldpStatsTxLLDPDULengthErrs	long	tmnxLldpStatsTxLLDPDULengthErrs	The number of LLDPD Length Errors recorded for the Port. REFERENCE IEEE Std 802.1AB-200X 10.2.7.2.
lldpStatsTxPortFrames	long	tmnxLldpStatsTxPortFrames	The number of LLDP frames transmitted by this LLDP agent on the indicated port. REFERENCE IEEE Std 802.1AB-200X 10.5.2.

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Table H-19 mld statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: TIMETRA-MLD-MIB.vRtrMldIfStatsTable Monitored class: mld.Interface			
importPolicyDrops	long	vRtrMldIfImportPolicyDrops	The value of vRtrMldIfImportPolicyDrops indicates the total number of times the MLD protocol instance matched the host IP address or group or source addresses specified in the import policy vRtrMldIfImportPolicy.
rxBadChecksumPkts	long	vRtrMldIfRxBadChecksumPkts	The value of vRtrMldIfRxBadChecksumPkts indicates the total number of MLD packets with bad checksum received on this interface.
rxBadEncodings	long	vRtrMldIfRxBadEncodings	The value of vRtrMldIfRxBadEncodings indicates the total number of MLD packets received on this interface which were not encoded correctly.
rxBadLenPkts	long	vRtrMldIfRxBadLenPkts	The value of vRtrMldIfRxBadLenPkts indicates the total number of MLD packets with bad length received on this interface.
rxBadReceiveIfPkts	long	vRtrMldIfRxBadReceiveIfPkts	The value of vRtrMldIfRxBadReceiveIfPkts indicates the total number of MLD packets incorrectly received on this interface.
rxGenQueries	long	vRtrMldIfRxGenQueries	The value of vRtrMldIfRxGenQueries indicates the total number of MLD General Queries received on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
rxGrpQueries	long	vRtrMldIfRxGrpQueries	The value of vRtrMldIfRxGrpQueries indicates the number of MLD Group Specific Queries received on this interface.
rxGrpSrcQueries	long	vRtrMldIfRxGrpSrcQueries	The value of vRtrMldIfRxGrpSrcQueries indicates the number of MLD Group and Source Specific Queries received on this interface.
rxLeaves	long	vRtrMldIfRxLeaves	The value of vRtrMldIfRxLeaves indicates the total number of MLD V2 Leaves received on this interface.
rxLocalScopePkts	long	vRtrMldIfRxLocalScopePkts	The value of the object vRtrMldIfRxLocalScopePkts indicates the number of MLD packets received on the link-local scope IPv6 multicast address.
rxNonLocal	long	vRtrMldIfRxNonLocal	The value of vRtrMldIfRxNonLocal indicates the total number of MLD packets received from a non-local sender.
rxNoRtrAlertPkts	long	vRtrMldIfRxNoRtrAlertPkts	The value of vRtrMldIfRxNoRtrAlertPkts indicates the total number of MLDv3 packets received on this interface which did not have the router alert flag set.
rxPktDrops	long	vRtrMldIfRxPktDrops	The value of vRtrMldIfRxPktDrops indicates the total number of MLD packets that were received on this interface but were dropped.
rxRsvdScopePkts	long	vRtrMldIfRxRsvdScopePkts	The value of the object vRtrMldIfRxRsvdScopePkts indicates the number of MLD packets received on the reserved scope IPv6 multicast address.
rxUnknownTypePkts	long	vRtrMldIfRxUnknownTypePkts	The value of vRtrMldIfRxUnknownTypePkts indicates the total number of MLD packets with unknown type received on this interface.
rxV1Reports	long	vRtrMldIfRxV1Reports	The value of vRtrMldIfRxV1Reports indicates the total number of MLD V1 Reports received on this interface.
rxV2Reports	long	vRtrMldIfRxV2Reports	The value of vRtrMldIfRxV2Reports indicates the total number of MLD V2 Reports received on this interface.
rxWrongVersions	long	vRtrMldIfRxWrongVersions	The value of vRtrMldIfRxWrongVersions indicates the total number of MLD packets with wrong versions received on this interface.
statsSGTypes	long	vRtrMldIfStatsSGTypes	The value of vRtrMldIfStatsSGTypes indicates the number of entries on this interface for which the source type is 'sg'.
statsStarGTypes	long	vRtrMldIfStatsStarGTypes	vRtrMldIfStatsStarGTypes indicates the number of entries on this interface for which the source type is 'starG'.
txErrors	long	vRtrMldIfTxErrors	The value of vRtrMldIfTxErrors indicates the total number of times there was an error transmitting the MLD packets on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
txGenQueries	long	vRtrMldIfTxGenQueries	The value of vRtrMldIfTxGenQueries indicates the number of MLD General Queries transmitted on this interface.
txGrpQueries	long	vRtrMldIfTxGrpQueries	The value of vRtrMldIfTxGrpQueries indicates the number of MLD Group Specific Queries transmitted on this interface.
txGrpSrcQueries	long	vRtrMldIfTxGrpSrcQueries	The value of vRtrMldIfTxGrpSrcQueries indicates the number of MLD Group and Source Specific Queries transmitted on this interface.
txLeaves	long	vRtrMldIfTxLeaves	The value of vRtrMldIfTxLeaves indicates the total number of MLD Leaves transmitted on this interface.
txV1Reports	long	vRtrMldIfTxV1Reports	The value of vRtrMldIfTxV1Reports indicates the total number of MLD V1 Reports transmitted on this interface.
txV2Reports	long	vRtrMldIfTxV2Reports	The value of vRtrMldIfTxV2Reports indicates the total number of MLD V2 Reports transmitted on this interface.
SiteStats MIB table name: TIMETRA-MLD-MIB.vRtrMldGenStatsTable Monitored class: mld.Site			
statsSGTypes	long	vRtrMldGenStatsSGTypes	The value of vRtrMldGenStatsSGTypes indicates the number of entries in vRtrMldGrpSrcTable for which the source type is 'sg'.
statsStarGTypes	long	vRtrMldGenStatsStarGTypes	The value of vRtrMldGenStatsStarGTypes indicates the number of entries in vRtrMldGrpSrcTable for which the source type is 'starG'.

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Table H-20 mpls statistics

5620 SAM counter name	Type	MIB counter name	Description
DynamicLspStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatTable Monitored class: mpls.DynamicLsp			
configuredPaths	long	vRtrMplsLspConfiguredPaths	The number of paths configured for this LSP.
operationalPaths	long	vRtrMplsLspOperationalPaths	The number of operational paths for this LSP. This includes the path currently active, as well as operational standby paths.
pathChanges	long	vRtrMplsLspPathChanges	The number of path changes this LSP has had. For every path change (path down, path up, path change), a corresponding syslog/trap (if enabled) is generated for it.

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5620 SAM counter name	Type	MIB counter name	Description
standbyPaths	long	vRtrMplsLspStandbyPaths	The number of standby paths configured for this LSP.
timeSinceLastPathChange	long	vRtrMplsLspLastPathChange	The time in 10-millisecond units since the last change occurred on this LSP.
timeSinceLastPrimaryUpState	long	vRtrMplsLspPrimaryTimeUp	The total time in 10-millisecond units that this LSP's primary path has been operational. For example, the percentage contribution of the primary path to the operational time is given by (vRtrMplsLspPrimaryTimeUp/vRtrMplsLspTimeUp * 100) .
LspPathStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspPathStatTable Monitored class: mpls.LspPath			
cspfQueries	long	vRtrMplsLspPathCspfQueries	The value of vRtrMplsLspPathCspfQueries specifies the number of CSPF queries that have been made for this LSP path.
retryAttempts	long	vRtrMplsLspPathRetryAttempts	The number of unsuccessful attempts which have been made to signal this path. As soon as the path gets signalled, this is set to 0.
timeDown	long	vRtrMplsLspPathTimeDown	The total time in 10-millisecond units that this LSP Path has not been operational.
timeUp	long	vRtrMplsLspPathTimeUp	The total time in 10-millisecond units that this LSP path has been operational. For example, the percentage up time can be determined by computing (vRtrMplsLspPathTimeUp/vRtrMplsLspAge * 100).
transitionCount	long	vRtrMplsLspPathTransitionCount	The object vRtrMplsLspPathTransitionCount maintains the number of transitions that have occurred for this LSP.
LspStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatTable Monitored classes: • mpls.DynamicLsp • mpls.StaticLsp • mpls.BypassOnlyLsp			
age	long	vRtrMplsLspAge	The age (i.e., time from creation till now) of this LSP in 10-millisecond periods.
timeSinceLastDownState	long	vRtrMplsLspTimeDown	The total time in 10-millisecond units that this LSP has not been operational.
timeSinceLastTransition	long	vRtrMplsLspLastTransition	The time in 10-millisecond units since the last transition occurred on this LSP.
timeSinceLastUpState	long	vRtrMplsLspTimeUp	The total time in 10-millisecond units that this LSP has been been operational. For example, the percentage up time can be determined by computing (vRtrMplsLspTimeUp/vRtrMplsLspAge * 100).

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5620 SAM counter name	Type	MIB counter name	Description
transitions	long	vRtrMplsLspTransitions	The number of state transitions (up -> down and down -> up) this LSP has undergone.
MplsInterfaceStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsIfStatTable Monitored class: mpls.Interface			
receiveOctets	UINT128	vRtrMplsIfRxOctetCount	The total number of bytes in MPLS labeled packets received on this interface.
receivePackets	UINT128	vRtrMplsIfRxPktCount	The total number of MPLS labeled packets received on this interface.
transmitOctets	UINT128	vRtrMplsIfTxOctetCount	The total number of bytes in MPLS labeled packets transmitted on this interface.
transmitPackets	UINT128	vRtrMplsIfTxPktCount	The total number of MPLS labeled packets transmitted from this interface.
MplsLspEgressStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatisticsTable Monitored class: mpls.DynamicLsp			
psbMatch	boolean	vRtrMplsLspStatsPSBMatch	The value of vRtrMplsLspStatsPSBMatch indicates if a path state block (PSB) match was made against this LSP name.
MplsLspIngressStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatisticsTable Monitored class: mpls.IngStatsPolicy			
psbMatch	boolean	vRtrMplsLspStatsPSBMatch	The value of vRtrMplsLspStatsPSBMatch indicates if a path state block (PSB) match was made against this LSP name.
SiteStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsGeneralStatTable Monitored class: mpls.Site			
detourOriginate	long	vRtrMplsGeneralDetourLspOriginate	The value of vRtrMplsGeneralDetourLspOriginate indicates the number of detour LSPs that originate at this virtual router.
detourTerminate	long	vRtrMplsGeneralDetourLspTerminate	The value of vRtrMplsGeneralDetourLspTerminate indicates the number of detour LSPs that terminate at this virtual router.
detourTransit	long	vRtrMplsGeneralDetourLspTransit	The value of vRtrMplsGeneralDetourLspTransit indicates the number of detour LSPs that transit through this virtual router.
dynamicOriginate	long	vRtrMplsGeneralDynamicLspOriginate	The value of vRtrMplsGeneralDynamicLspOriginate indicates the number of dynamic LSPs that originate at this virtual router.
dynamicTerminate	long	vRtrMplsGeneralDynamicLspTerminate	The value of vRtrMplsGeneralDynamicLspTerminate indicates the number of dynamic LSPs that terminate at this virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
dynamicTransit	long	vRtrMplsGeneralDynamicLspTransit	The value of vRtrMplsGeneralDynamicLspTransit indicates the number of dynamic LSPs that transit through this virtual router.
staticOriginate	long	vRtrMplsGeneralStaticLspOriginate	The value of vRtrMplsGeneralStaticLspOriginate indicates the number of static LSPs that originate at this virtual router.
staticTerminate	long	vRtrMplsGeneralStaticLspTerminate	The value of vRtrMplsGeneralStaticLspTerminate indicates the number of static LSPs that terminate at this virtual router.
staticTransit	long	vRtrMplsGeneralStaticLspTransit	The value of vRtrMplsGeneralStaticLspTransit indicates the number of static LSPs that transit through this virtual router.

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Table H-21 msdp statistics

5620 SAM counter name	Type	MIB counter name	Description
PeerStats MIB table name: TIMETRA-MSDP-MIB.tmnxMsdpPeerStatsTable Monitored classes: • msdp.Peer • msdp.GroupPeer			
errorMsgsReceived	long	tmnxMsdpPeerStatsErrorMsgsRecvd	The value of tmnxMsdpPeerStatsErrorMsgsRecvd indicates number of error messages received.
keepAliveMsgsReceived	long	tmnxMsdpPeerStatsKAMsgsRecvd	The value of tmnxMsdpPeerStatsKAMsgsRecvd indicates the number of keep-alive messages received.
keepAliveMsgsSent	long	tmnxMsdpPeerStatsKAMsgsSent	The value of tmnxMsdpPeerStatsKAMsgsSent indicates the number of keep-alive messages sent.
lastMsgPeer	long	tmnxMsdpPeerStatsLastMsgPeer	The value of tmnxMsdpPeerStatsLastMsgPeer indicates how long ago the last message was received from this peer instance.
lastStateChange	long	tmnxMsdpPeerStatsLastStChange	The value of tmnxMsdpPeerStatsLastStChange indicates how long ago the peer state changed.
peerTimeouts	long	tmnxMsdpPeerStatsPeerTimeouts	The value of tmnxMsdpPeerStatsPeerTimeouts indicates the number of peer timeouts.
remoteCloses	long	tmnxMsdpPeerStatsRemoteCloses	The value of tmnxMsdpPeerStatsRemoteCloses indicates the number of times the remote peer closed.

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5620 SAM counter name	Type	MIB counter name	Description
reservedMsgsReceived	long	tmnxMsdpPeerStatsResvMsgsRecvd	The value of tmnxMsdpPeerStatsResvMsgsRecvd indicates the number of MSDP messages received with type 'Reserved'.
rpfFailures	long	tmnxMsdpPeerStatsRPFFailures	The value of tmnxMsdpPeerStatsRPFFailures indicates number of reverse path forwarding (RPF) failures.
saLearned	long	tmnxMsdpPeerStatsSALearnt	The value of tmnxMsdpPeerStatsSALearnt indicates the number of unique source active entries in the cache learned from the peer.
saLimitExceeded	long	tmnxMsdpPeerStatsActSrcLimExcd	The value of tmnxMsdpPeerStatsActSrcLimExcd indicates the number of times the global active source limit has been exceeded by this peer instance.
saMsgsReceived	long	tmnxMsdpPeerStatsSAMsgsRecvd	The value of tmnxMsdpPeerStatsSAMsgsRecvd indicates the number of source-active messages received.
saMsgsSent	long	tmnxMsdpPeerStatsSAMsgsSent	The value of tmnxMsdpPeerStatsSAMsgsSent indicates the number of source-active messages sent.
saRejectExportPolicy	long	tmnxMsdpPeerStatsSARejImpPolicy	The value of tmnxMsdpPeerStatsSARejImpPolicy indicates the number of source active messages from the peer that were rejected due to import policy.
saRejectImportPolicy	long	tmnxMsdpPeerStatsSARejExpPolicy	The value of tmnxMsdpPeerStatsSARejExpPolicy indicates the number of source active messages from the peer that were not sent due to export policy.
saRequestMsgsReceived	long	tmnxMsdpPeerStatsSAReqMsgsRecvd	The value of tmnxMsdpPeerStatsSAReqMsgsRecvd indicates the number of source-active request messages received.
saRequestMsgsSent	long	tmnxMsdpPeerStatsSAReqMsgsSent	The value of tmnxMsdpPeerStatsSAReqMsgsSent indicates the number of source-active request messages sent.
saResponseMsgsReceived	long	tmnxMsdpPeerStatsSAResMsgsRecvd	The value of tmnxMsdpPeerStatsSAResMsgsRecvd indicates the number of source-active response messages received.
saResponseMsgsSent	long	tmnxMsdpPeerStatsSAResMsgsSent	The value of tmnxMsdpPeerStatsSAResMsgsSent indicates the number of source-active response messages sent.
unknownMsgsReceived	long	tmnxMsdpPeerStatsUnknMsgsRecvd	The value of tmnxMsdpPeerStatsUnknMsgsRecvd indicates the number of unknown messages received.

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Table H-22 multicast statistics

5620 SAM counter name	Type	MIB counter name	Description
McastCacChannelServiceStats MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacServStatsTable Monitored class: multicast.McastCacPolicy			
action	int	tmnxMcacServStatsAction	The value of tmnxMcacServStatsAction indicates the action specified by the mcac policy for the service application to act upon.
algorithmReapply	boolean	tmnxMcacServStatsAlgoReapply	The value of tmnxMcacServStatsAlgoReapply indicates if the mcac policy was reapplied on the already accepted channel due lag constraints or if this was the first request for this channel from the service application.
bundleAvailBw	long	tmnxMcacServStatsBundleAvailBW	The value of tmnxMcacServStatsBundleAvailBW indicates the available bundle bandwidth after the requested channel was either accepted or discarded by the mcac policy.
channelBw	long	tmnxMcacServStatsChannelBW	The value of tmnxMcacServStatsChannelBW indicates the channel bandwidth configured at the mcac policy at the time of request from the service application.
channelRequestCount	long	tmnxMcacServStatsApplyAttempts	The value of tmnxMcacServStatsApplyAttempts indicates the number of times the mcac policy was applied for a particular channel entry by the service application.
channelType	int	tmnxMcacServStatsChannelType	The value of tmnxMcacServStatsChannelType indicates the channel type configured at the mcac policy at the time of request from the service application.
encapValueOrVCId	String	tmnxMcacServStatsEncapValue	The value of tmnxMcacServStatsEncapValue indicates the SAP/SDP Encap value of which the mcac policy is applied.
interfaceAvailBw	long	tmnxMcacServStatsIntfAvailBW	The value of tmnxMcacServStatsIntfAvailBW indicates the available interface bandwidth after the requested channel was either accepted or discarded by the mcac policy.
portIdOrTunnelId	String	tmnxMcacServStatsPortId	The value of tmnxMcacServStatsPortId indicates the port Id of the SAP/SDP on which the mcac policy is applied.
reason	int	tmnxMcacServStatsReason	The value of tmnxMcacServStatsReason indicates the reason for the action specified by the mcac policy for the service application to act upon.

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5620 SAM counter name	Type	MIB counter name	Description
timeStamp	long	tmnxMcacServStatsTimeStamp	The value of tmnxMcacServStatsTimeStamp indicates the timestamp of the last time the mcac policy was applied for this channel entry.
McastCacChannelStats MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacStatsTable Monitored class: multicast.McastCacPolicy			
action	int	tmnxMcacStatsAction	The value of tmnxMcacStatsAction indicates the action specified by the mcac policy for the application interface to act upon.
algorithmReapply	boolean	tmnxMcacStatsAlgoReapply	The value of tmnxMcacStatsAlgoReapply indicates if the mcac policy was reapplied on the already accepted channel due lag constraints or if this was the first request for this channel from the application.
bundleAvailBw	long	tmnxMcacStatsBundleAvailBW	The value of tmnxMcacStatsBundleAvailBW indicates the available bundle bandwidth after the requested channel was either accepted or discarded by the mcac policy.
bundleName	String	tmnxMcacStatsBundleName	The value of tmnxMcacStatsBundleName indicates the name of the multicast CAC policy bundle. The value of tmnxMcacStatsBundleName could be an empty string, meaning that this particular statistics entry's channel did not belong to any bundle in the policy.
channelAddress	String	tmnxMcacStatsChlAddr	The value of tmnxMcacStatsChlAddr indicates the address of the multicast channel that mcac policy was applied upon when requested by the application interface. Address type is indicated by tmnxMcacStatsChlAddrType.
channelAddressType	int	tmnxMcacStatsChlAddrType	The value of tmnxMcacStatsChlAddrType indicates the address type of tmnxMcacStatsChlAddr.
channelBw	long	tmnxMcacStatsChannelBW	The value of tmnxMcacStatsChannelBW indicates the channel bandwidth configured at the mcac policy at the time of request from the application interface.
channelRequestCount	long	tmnxMcacStatsApplyAttempts	The value of tmnxMcacStatsApplyAttempts indicates the number of times the mcac policy was applied for a particular channel entry by the application.
channelType	int	tmnxMcacStatsChannelType	The value of tmnxMcacStatsChannelType indicates the channel type configured at the mcac policy at the time of request from the application interface.
interfaceAvailBw	long	tmnxMcacStatsIntfAvailBW	The value of tmnxMcacStatsIntfAvailBW indicates the available interface bandwidth after the requested channel was either accepted or discarded by the mcac policy.

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5620 SAM counter name	Type	MIB counter name	Description
interfaceId	long	tmnxMcacStatsIfIndex	The value of tmnxMcacStatsIfIndex indicates the application interface index that has applied mcac policy.
protocolName	int	tmnxMcacStatsProtocolIndex	The value of tmnxMcacStatsProtocolIndex indicates the application that has applied mcac policy.
reason	int	tmnxMcacStatsReason	The value of tmnxMcacStatsReason indicates the reason for the action specified by the mcac policy for the application interface to act upon.
timeStamp	long	tmnxMcacStatsTimeStamp	The value of tmnxMcacStatsTimeStamp indicates the timestamp of the last time the mcac policy was applied for this channel entry.
McastCacOper MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacOperTable Monitored class: multicast.McastCacPolicy			
activeChannels	long	tmnxMcacOperActiveChannels	The value of tmnxMcacOperActiveChannels indicates the number of active channels for this entry.
availMandBw	long	tmnxMcacOperAvailMandBw	The value of tmnxMcacOperAvailMandBw indicates the operational pre-reserved bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this protocol interface instance.
availOptionalBw	long	tmnxMcacOperAvailOptnlBw	The value of tmnxMcacOperAvailOptnlBw indicates the operational available bandwidth in kilo-bits per second(kbps) on the bundle for this protocol interface instance.
currConstrtLvl	long	tmnxMcacOperCurrConstrtLvl	The value of tmnxMcacOperCurrConstrtLvl indicates the current lag constraints bundle level id for the number of ports down (tmnxMcacOperPortsDown). This value is used to index the table tmnxMcacLevelTable to get the bundle level bandwidth.
inUseMandBw	long	tmnxMcacOperInUseMandBw	The value of tmnxMcacOperInUseMandBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this protocol interface instance.
inUseOptionalBw	long	tmnxMcacOperInUseOptnlBw	The value of tmnxMcacOperInUseOptnlBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the optional channels on the bundle for this protocol interface instance.
maxBw	long	tmnxMcacOperMaxBw	The value of tmnxMcacOperMaxBw indicates the operational maximum bandwidth in kilo-bits per second(kbps) on the bundle for this protocol interface instance.

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5620 SAM counter name	Type	MIB counter name	Description
portsDown	long	tmnxMcacOperPortsDown	The value of tmnxMcacOperPortsDown indicates the the number of ports down on the application interface. This value is used to index the table tmnxMcacLagTable to get the bundle level id.
valuesInTransit	boolean	tmnxMcacOperValuesInTransit	The value of tmnxMcacOperValuesInTransit indicates that the operational (available and in-use mandatory/optional) value for the following objects are in transition due to configuration change: tmnxMcacOperAvailOptnlBw tmnxMcacOperAvailMandBw tmnxMcacOperInUseMandBw tmnxMcacOperInUseOptnlBw When Multicast CAC Policy is applied on the interface for the join of the next channel, the operational values will be recalculated and applied to the above objects and the value for tmnxMcacOperValuesInTransit will be set to 'false'. If the value of tmnxMcacOperValuesInTransit is 'true' then the values are in transition.
McastCacServOperStats MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacServOperTable Monitored class: multicast.McastCacPolicy			
activeChannels	long	tmnxMcacServOperActiveChannels	The value of tmnxMcacServOperActiveChannels indicates the number of active channels for this entry.
availMandBw	long	tmnxMcacServOperAvailMandBw	The value of tmnxMcacServOperAvailMandBw indicates the operational pre-reserved bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this service application on sap/sdp instance.
availOptionalBw	long	tmnxMcacServOperAvailOptnlBw	The value of tmnxMcacServOperAvailOptnlBw indicates the operational available bandwidth in kilo-bits per second(kbps) on the bundle for this service application on sap/sdp instance.
currConstrtLvl	long	tmnxMcacServOperCurrConstrtLvl	The value of tmnxMcacServOperCurrConstrtLvl indicates the current lag constraints bundle level id for the number of ports down (tmnxMcacServOperPortsDown). This value is used to index the table tmnxMcacLevelTable to get the bundle level bandwidth.
inUseMandBw	long	tmnxMcacServOperInUseMandBw	The value of tmnxMcacServOperInUseMandBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this service application on sap/sdp instance.

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5620 SAM counter name	Type	MIB counter name	Description
inUseOptionalBw	long	tmnxMcacServOperInUseOptnlBw	The value of tmnxMcacServOperInUseOptnlBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the optional channels on the bundle for this service application on sap/sdp instance.
maxBw	long	tmnxMcacServOperMaxBw	The value of tmnxMcacServOperMaxBw indicates the operational maximum bandwidth in kilo-bits per second(kbps) on the bundle for this service application on sap/sdp instance.
portsDown	long	tmnxMcacServOperPortsDown	The value of tmnxMcacServOperPortsDown indicates the the number of ports down on the service application on sap/sdp. This value is used to index the table tmnxMcacLagTable to get the bundle level id.
valuesInTransit	boolean	tmnxMcacServOperValuesInTransit	The value of tmnxMcacServOperValuesInTransit indicates that the operational (available and in-use mandatory/optional) value for the following objects are in transition due to configuration change: tmnxMcacServOperAvailOptnlBw tmnxMcacServOperAvailMandBw tmnxMcacServOperInUseMandBw tmnxMcacServOperInUseOptnlBw When Multicast CAC Policy is applied on the sap/sdp for the join of the next channel, the operational values will be recalculated and applied to the above objects and the value for tmnxMcacServOperValuesInTransit will be set to 'false'. If the value of tmnxMcacServOperValuesInTransit is 'true' then the values are in transition.

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Table H-23 multichassis statistics

5620 SAM counter name	Type	MIB counter name	Description
MultiChassisPeerRingStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcrPeerStatsTable Monitored class: multichassis.Peer			
keepAlivePacketsTransmitted	long	tmnxMcrPeerStatsTxKeepAlive	The value of tmnxMcrPeerStatsTxKeepAlive indicates how many valid MC-Ring control packets of type 'keepalive' were transmitted to the peer.
mcsIdRequestPacketsReceived	long	tmnxMcrPeerStatsRxMcsIdReq	The value of tmnxMcrPeerStatsRxMcsIdReq indicates how many valid MCS ID requests were received from the peer.

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5620 SAM counter name	Type	MIB counter name	Description
mcsIdRequestPacketsTransmitted	long	tmnxMcrPeerStatsTxMcsIdReq	The value of tmnxMcrPeerStatsTxMcsIdReq indicates how many valid MCS ID requests were transmitted to the peer.
mcsIdResponsePacketsReceived	long	tmnxMcrPeerStatsRxMcsIdRsp	The value of tmnxMcrPeerStatsRxMcsIdRsp indicates how many valid MCS ID responses were received from the peer.
mcsIdResponsePacketsTransmitted	long	tmnxMcrPeerStatsTxMcsIdRsp	The value of tmnxMcrPeerStatsTxMcsIdRsp indicates how many valid MCS ID responses were transmitted to the peer.
ringExistsRequestPacketsReceived	long	tmnxMcrPeerStatsRxRingExistsReq	The value of tmnxMcrPeerStatsRxRingExistsReq indicates how many valid 'ring exists' requests were received from the peer.
ringExistsRequestPacketsTransmitted	long	tmnxMcrPeerStatsTxRingExistsReq	The value of tmnxMcrPeerStatsTxRingExistsReq indicates how many valid 'ring exists' requests were transmitted to the peer.
ringExistsResponsePacketsReceived	long	tmnxMcrPeerStatsRxRingExistsRsp	The value of tmnxMcrPeerStatsRxRingExistsRsp indicates how many valid 'ring exists' responses were received from the peer.
ringExistsResponsePacketsTransmitted	long	tmnxMcrPeerStatsTxRingExistsRsp	The value of tmnxMcrPeerStatsTxRingExistsRsp indicates how many valid 'ring exists' responses were transmitted to the peer.
ringKeepAlivePacketsReceived	long	tmnxMcrPeerStatsRxKeepAlive	The value of tmnxMcrPeerStatsRxKeepAlive indicates how many valid MC-Ring control packets of type 'keepalive' were received from the peer.
ringSignallingPacketsReceived	long	tmnxMcrPeerStatsRx	The value of tmnxMcrPeerStatsRx indicates how many valid MC-Ring signalling messages were received from the peer.
ringSignallingPacketsTransmitted	long	tmnxMcrPeerStatsTx	The value of tmnxMcrPeerStatsTx indicates how many valid MC-Ring signalling messages were transmitted to the peer.
MultiChassisRingNodeStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcrRingNodeStatsTable Monitored class: multichassis.MultiChassisRingNode			
detectedPacketsAcknowledged	long	tmnxMcrRingNodeStatsTxDetectAck	The value of tmnxMcrRingNodeStatsTxDetectAck indicates how many valid 'detected ring node' signalling messages were acknowledged to the peer for this multi-chassis ring node.

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5620 SAM counter name	Type	MIB counter name	Description
detectedPacketsPeerAcknowledged	long	tmnxMcrRingNodeStatsRxDetectAck	The value of tmnxMcrRingNodeStatsRxDetectAck indicates how many valid 'detected ring node' signalling messages were acknowledged by the peer for this multi-chassis ring node.
detectedPacketsReceived	long	tmnxMcrRingNodeStatsRxDetect	The value of tmnxMcrRingNodeStatsRxDetect indicates how many valid 'detected ring node' signalling messages were received from the peer for this multi-chassis ring node.
detectedPacketsTransmitted	long	tmnxMcrRingNodeStatsTxDetect	The value of tmnxMcrRingNodeStatsTxDetect indicates how many valid 'detected ring node' signalling messages were transmitted to the peer for this multi-chassis ring node.
rncvPacketsReceived	long	tmnxMcrRingNodeStatsRncvRxResp	The value of tmnxMcrRingNodeStatsRncvRxResp indicates how many valid connectivity verification messages were received from this multi-chassis ring node.
rncvPacketsRoundTripTime	long	tmnxMcrRingNodeStatsRncvRtTime	The value of tmnxMcrRingNodeStatsRncvRtTime indicates the round-trip-time of the last successful connectivity verification for this multi-chassis ring node. If there has not been a successful connectivity verification, the value of tmnxMcrRingNodeStatsRncvRtTime is zero.
rncvPacketsTransmitted	long	tmnxMcrRingNodeStatsRncvTxReq	The value of tmnxMcrRingNodeStatsRncvTxReq indicates how many valid connectivity verification messages were transmitted to this multi-chassis ring node.
MultiChassisRingStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcrRingStatsTable Monitored class: multichassis.MultiChassisRing			
opaquePacketsReceivedDelivered	long	tmnxMcrRingStatsRxOpaqueDelivrd	The value of tmnxMcrRingStatsRxOpaqueDelivrd indicates how many valid opaque signalling messages were received from the peer and delivered for this multi-chassis ring.
opaquePacketsReceivedNoDestination	long	tmnxMcrRingStatsRxOpaqueNoDest	The value of tmnxMcrRingStatsRxOpaqueNoDest indicates how many valid opaque signalling messages were received from the peer and for which no destination could be found.
opaquePacketsTransmitted	long	tmnxMcrRingStatsTxOpaque	The value of tmnxMcrRingStatsTxOpaque indicates how many valid opaque signalling messages were transmitted to the peer for this multi-chassis ring.

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5620 SAM counter name	Type	MIB counter name	Description
sapsChangedPacketsReceived	long	tmnxMcrRingStatsRxSapsChanged	The value of tmnxMcrRingStatsRxSapsChanged indicates how many valid 'SAPs changed info' signalling messages were received from the peer for this multi-chassis ring.
sapsChangedPacketsTransmitted	long	tmnxMcrRingStatsTxSapsChanged	The value of tmnxMcrRingStatsTxSapsChanged indicates how many valid 'SAPs changed info' signalling messages were transmitted to the peer for this multi-chassis ring.
PeerStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcLagPeerStatsTable Monitored class: multichassis.Peer			
configPacketsReceived	long	tmnxMcLagPeerStatsPktsRxConfig	The value of tmnxMcLagPeerStatsPktsRxConfig indicates how many valid MC-Lag control packets of type lag config were received on this system from the peer.
failedMD5AuthenticationPacketsDropped	long	tmnxMcLagPeerStatsDropMD5	The value of tmnxMcLagPeerStatsDropMD5 indicates how many MC-Lag control packets were dropped on this system from the peer because the packet failed MD5 authentication.
failedPacketsTransmitted	long	tmnxMcLagPeerStatsPktsTxFailed	The value of tmnxMcLagPeerStatsPktsTxFailed indicates how many MC-Lag control packets failed to be transmitted from this system to the peer.
invalidLagIdPacketsDropped	long	tmnxMcLagPeerStatsDropTlvInvldId	The value of tmnxMcLagPeerStatsDropTlvInvldId indicates how many MC-Lag control packets were dropped on this system from the peer because the packet referred to an invalid or non multi-chassis lag.
invalidSizePacketsDropped	long	tmnxMcLagPeerStatsDropTlvInvldSz	The value of tmnxMcLagPeerStatsDropTlvInvldSz indicates how many MC-Lag control packets were dropped on this system from the peer because the packet size was invalid.
keepAlivePacketsReceived	long	tmnxMcLagPeerStatsPktsRxKpalive	The value of tmnxMcLagPeerStatsPktsRxKpalive indicates how many valid MC-Lag control packets of type keepalive were received on this system from the peer.
keepalivePacketsTransmitted	long	tmnxMcLagPeerStatsPktsTxKpalive	The value of tmnxMcLagPeerStatsPktsTxKpalive indicates how many MC-Lag control packets of type keepalive were transmitted from this system to the peer.

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5620 SAM counter name	Type	MIB counter name	Description
outOfSequencePacketsDropped	long	tmnxMcLagPeerStatsDropOutOfSeq	The value of tmnxMcLagPeerStatsDropOutOfSeq indicates how many MC-Lag control packets were dropped on this system from the peer because the packet was out of sequence.
packetsReceived	long	tmnxMcLagPeerStatsPktsRx	The value of tmnxMcLagPeerStatsPktsRx indicates how many valid MC-Lag control packets were received on this system from the peer.
packetsTransmitted	long	tmnxMcLagPeerStatsPktsTx	The value of tmnxMcLagPeerStatsPktsTx indicates how many MC-Lag control packets were transmitted from this system to the peer.
peerConfigPacketsReceived	long	tmnxMcLagPeerStatsPktsRxPeerCfg	The value of tmnxMcLagPeerStatsPktsRxPeerCfg indicates how many valid MC-Lag control packets of type peer config were received on this system from the peer.
peerConfigPacketsTransmitted	long	tmnxMcLagPeerStatsPktsTxPeerCfg	The value of tmnxMcLagPeerStatsPktsTxPeerCfg indicates how many MC-Lag control packets of type peer config were transmitted from this system to the peer.
stateDisabledPacketsDropped	long	tmnxMcLagPeerStatsDropStateDsbld	The value of tmnxMcLagPeerStatsDropStateDsbld indicates how many MC-Lag control packets were dropped on this system from the peer because the peer was administratively disabled.
statePacketsReceived	long	tmnxMcLagPeerStatsPktsRxState	The value of tmnxMcLagPeerStatsPktsRxState indicates how many valid MC-Lag control packets of type lag state were received on this system from the peer.
tooShortPacketsDropped	long	tmnxMcLagPeerStatsDropPktTooShrt	The value of tmnxMcLagPeerStatsDropPktTooShrt indicates how many MC-Lag control packets were dropped on this system from the peer because the packet was too short.
unknownTlvPacketsDropped	long	tmnxMcLagPeerStatsDropUnknownTlv	The value of tmnxMcLagPeerStatsDropUnknownTlv indicates how many MC-Lag control packets were dropped on this system from the peer because the packet contained an unknown TLV.
PeerSynchronizationProtocolStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcPeerSyncStatsTable Monitored class: multichassis.PeerSynchronizationProtocol			
bodyDecodeErrorPacketsReceived	long	tmnxMcPeerSyncPktsRxErrBody	The value of tmnxMcPeerSyncPktsRxErrBody indicates the number of packets with body decode errors received from the multi-chassis peer.

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5620 SAM counter name	Type	MIB counter name	Description
dataPacketsReceived	long	tmnxMcPeerSyncPktsRxData	The value of tmnxMcPeerSyncPktsRxData indicates the number of hello packets received from the multi-chassis peer.
dataPacketsTransmitted	long	tmnxMcPeerSyncPktsTxData	The value of tmnxMcPeerSyncPktsTxData indicates the number of data packets transmitted to the multi-chassis peer.
erroneousPacketsReceived	long	tmnxMcPeerSyncPktsRxErr	The value of tmnxMcPeerSyncPktsRxErr indicates the number of erroneous packets received from the multi-chassis peer.
headerDecodeErrorPacketsReceived	long	tmnxMcPeerSyncPktsRxErrHeader	The value of tmnxMcPeerSyncPktsRxErrHeader indicates the number of packets with header decode errors received from the multi-chassis peer.
helloPacketsReceived	long	tmnxMcPeerSyncPktsRxHello	The value of tmnxMcPeerSyncPktsRxHello indicates the number of hello packets received from the multi-chassis peer.
helloPacketsTransmitted	long	tmnxMcPeerSyncPktsTxHello	The value of tmnxMcPeerSyncPktsTxHello indicates the number of hello packets transmitted to the multi-chassis peer.
otherPacketsReceived	long	tmnxMcPeerSyncPktsRxOther	The value of tmnxMcPeerSyncPktsRxOther indicates the number of all other packet types received from the multi-chassis peer.
otherPacketsTransmitted	long	tmnxMcPeerSyncPktsTxOther	The value of tmnxMcPeerSyncPktsTxOther indicates the number of all other packet types transmitted to the multi-chassis peer.
packetTransmissionErrors	long	tmnxMcPeerSyncPktsTxErr	The value of tmnxMcPeerSyncPktsTxErr indicates the number of packet transmission errors.
sequenceNumberErrorPacketsReceived	long	tmnxMcPeerSyncPktsRxErrSeqNum	The value of tmnxMcPeerSyncPktsRxErrSeqNum indicates the number of packets with sequence number errors received from the multi-chassis peer.
totalPacketsReceived	long	tmnxMcPeerSyncPktsRxAll	The value of tmnxMcPeerSyncPktsRxAll indicates the total number of packets received from the multi-chassis peer.
totalPacketsTransmitted	long	tmnxMcPeerSyncPktsTxAll	The value of tmnxMcPeerSyncPktsTxAll indicates the total number of packets transmitted to the multi-chassis peer.

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Table H-24 ospf statistics

5620 SAM counter name	Type	MIB counter name	Description
AreaBasicStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfAreaTable Monitored class: ospf.AreaSite			

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5620 SAM counter name	Type	MIB counter name	Description
nssaTranslatorEvents	long	tmnxOspfAreaNssaTranslatorEvents	The value of tmnxOspfAreaNssaTranslatorEvents indicates the number of Translator State changes that have occurred since the last boot-up.
totalLSACount	long	tmnxOspfAreaScopeLsaCount	The value of tmnxOspfAreaScopeLsaCount indicates the total number of Area-Scope link state advertisements in this area's link-state database.
totalSpfRuns	long	tmnxOspfAreaSpfRuns	The value of tmnxOspfAreaSpfRuns indicates the number of times that the intra-area route table has been calculated using this area's link-state database. This is typically done using Dijkstra's algorithm.
totalUnknownLSACount	long	tmnxOspfAreaScopeUnkLsaCount	The value of tmnxOspfAreaScopeUnkLsaCount indicates the total number of unknown Area-Scope link-state advertisements in this area's link-state database.
InterfaceGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
events	long	tmnxOspfIfEvents	The value of tmnxOspfIfEvents indicates the number of times this OSPF interface has changed its state, or an error has occurred.
InterfaceReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF Database Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
lsasWithBadChecksums	long	tmnxOspfIfRxBadChecksums	The value of tmnxOspfIfRxBadChecksums indicates the count of LSAs received with bad checksums.
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
authorizationFailures	long	tmnxOspfIfAuthFailures	The value of tmnxOspfIfAuthFailures indicates the total number of OSPF packets received with an invalid authorization key since tmnxOspfAdminState was last set to 'enabled'.
badAreas	long	tmnxOspfIfBadAreas	The value of tmnxOspfIfBadAreas indicates the total number of OSPF packets received with an area mismatch since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badAuthorizationTypes	long	tmnxOspfIfBadAuthTypes	The value of tmnxOspfIfBadAuthTypes indicates the total number of OSPF packets received with an invalid authorization type since tmnxOspfAdminState was last set to 'enabled'.
badDeadIntervals	long	tmnxOspfIfBadDeadIntervals	The value of tmnxOspfIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badDestinationAddresses	long	tmnxOspfIfBadDstAddrs	The value of tmnxOspfIfBadDstAddrs indicates the total number of OSPF packets received with the incorrect IP destination address since tmnxOspfAdminState was last set to 'enabled'.
badHelloIntervals	long	tmnxOspfIfBadHelloIntervals	The value of tmnxOspfIfBadHelloIntervals indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badLengths	long	tmnxOspfIfBadLengths	The value of tmnxOspfIfBadLengths indicates the total number of OSPF packets received on this interface with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.
badNeighbors	long	tmnxOspfIfBadNeighbors	The value of tmnxOspfIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the information this router has for the neighbor since tmnxOspfAdminState was last set to 'enabled'.
badNetworks	long	tmnxOspfIfBadNetworks	The value of tmnxOspfIfBadNetworks indicates the total number of OSPF packets received with invalid network or mask since tmnxOspfAdminState was last set to 'enabled'.
badOptions	long	tmnxOspfIfBadOptions	The value of tmnxOspfIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this interface or area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfIfBadPacketTypes	The value of tmnxOspfIfBadPacketTypes indicates the total number of OSPF packets received with an invalid OSPF packet type since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badVersions	long	tmnxOspfIfBadVersions	The value of tmnxOspfIfBadVersions indicates the total number of OSPF packets received with bad OSPF version numbers since tmnxOspfAdminState was last set to 'enabled'.
badVirtualLinks	long	tmnxOspfIfBadVirtualLinks	The value of tmnxOspfIfBadVirtualLinks indicates the total number of OSPF packets received on this interface that are destined to a virtual link that does not exist since tmnxOspfAdminState was last set to 'enabled'.
discardPackets	long	tmnxOspfIfDiscardPackets	The value of tmnxOspfIfDiscardPackets indicates the total number of OSPF packets discarded on this interface since tmnxOspfAdminState was last set to 'enabled'.
retransmitOuts	long	tmnxOspfIfRetransmitOuts	The value of tmnxOspfIfRetransmitOuts indicates the total number of OSPF Retransmits sent on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF Database Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
NeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			
events	long	tmnxOspfNbrEvents	The value of tmnxOspfNbrEvents indicates the number of times this neighbor relationship has changed state, or an error has occurred.
retransmissionQueueLength	long	tmnxOspfNbrLsRetransQLen	The value of tmnxOspfNbrLsRetransQLen indicates the current length of the retransmission queue.
NeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			
badMtus	long	tmnxOspfNbrBadMTUs	The value of tmnxOspfNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badNeighborStates	long	tmnxOspfNbrBadNbrStates	The value of tmnxOspfNbrBadNbrStates indicates the total number of OSPF packets received when the neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfNbrBadPackets	The value of tmnxOspfNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfNbrBadSeqNums	The value of tmnxOspfNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
duplicates	long	tmnxOspfNbrDuplicates	The value of tmnxOspfNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfNbrLsaInstallFailed	The value of tmnxOspfNbrLsaInstallFailed indicates the total number of times an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfNbrLsaNotInLsdbs	The value of tmnxOspfNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.
numberOfRestarts	long	tmnxOspfNbrNumRestarts	The value of tmnxOspfNbrNumRestarts indicates the number of times the neighbor has attempted restart.
optionMismatches	long	tmnxOspfNbrOptionMismatches	The value of tmnxOspfNbrOptionMismatches indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
ShamLinkGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamIfStatsTable Monitored class: ospf.ShamLink			
events	long	tmnxOspfShamIfEvents	The value of tmnxOspfShamIfEvents indicates the number of state changes or error events on this sham link.
ShamLinkNeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamNbrStatsTable Monitored class: ospf.ShamLinkNeighbor			

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5620 SAM counter name	Type	MIB counter name	Description
events	long	tmnxOspfShamNbrEvents	The value of tmnxOspfShamNbrEvents indicates the number of times this sham link has changed its state, or an error has occurred.
retransmissionQueueLength	long	tmnxOspfShamNbrLsRetransQLen	The value of tmnxOspfShamNbrLsRetransQLen indicates the current length of the retransmission queue.
ShamLinkNeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamNbrStatsTable Monitored class: ospf.ShamLinkNeighbor			
badMtus	long	tmnxOspfShamNbrBadMTUs	The value of tmnxOspfShamNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfShamNbrBadPackets	The value of tmnxOspfShamNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfShamNbrBadSeqNums	The value of tmnxOspfShamNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
badVirtualNeighborStates	long	tmnxOspfShamNbrBadNbrStates	The value of tmnxOspfShamNbrBadNbrStates indicates the total number of OSPF packets received when the sham link neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
duplicates	long	tmnxOspfShamNbrDuplicates	The value of tmnxOspfShamNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfShamNbrLsaInstallFail	The value of tmnxOspfShamNbrLsaInstallFail indicates the total number of times when an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
lsaNotInLSDB	long	tmnxOspfShamNbrLsaNotInLsdbs	The value of tmnxOspfShamNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.
numberOfRestarts	long	tmnxOspfShamNbrNumRestarts	The value of tmnxOspfShamNbrNumRestarts indicates the number of times the sham link neighbor has attempted restart since tmnxOspfAdminState was last set to 'enabled'.
optionMismatches	long	tmnxOspfShamNbrOptionMismatch	The value of tmnxOspfShamNbrOptionMismatch indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
ShamLinkReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamIfStatsTable Monitored class: ospf.ShamLink			
databaseDescriptionPackets	long	tmnxOspfShamIfRxDBDs	The value of tmnxOspfShamIfRxDBDs indicates the total number of OSPF Database Description packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfShamIfTxDBDs	The value of tmnxOspfShamIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfShamIfRxHellos	The value of tmnxOspfShamIfRxHellos indicates the total number of OSPF Hello packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfShamIfTxHellos	The value of tmnxOspfShamIfTxHellos indicates the total number of OSPF Hello packets transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfShamIfRxLSAcks	The value of tmnxOspfShamIfRxLSAcks indicates the total number of Link State Acknowledgements received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfShamIfTxLSAcks	The value of tmnxOspfShamIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateRequests	long	tmnxOspfShamIfRxLSRs	The value of tmnxOspfShamIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfShamIfTxLSRs	The value of tmnxOspfShamIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfShamIfRxLSUs	The value of tmnxOspfShamIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfShamIfTxLSUs	The value of tmnxOspfShamIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
lsasWithBadChecksums	long	tmnxOspfShamIfRxBadChecksums	The value of tmnxOspfShamIfRxBadChecksums indicates the count of LSAs received with bad checksums.
totalPackets	long	tmnxOspfShamIfRxPackets	The value of tmnxOspfShamIfRxPackets indicates the total number of OSPF packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfShamIfTxPackets	The value of tmnxOspfShamIfTxPackets indicates the total number of OSPF packets transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
ShamLinkStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamIfStatsTable Monitored class: ospf.ShamLink			
authorizationFailures	long	tmnxOspfShamIfAuthFailures	The value of tmnxOspfShamIfAuthFailures indicates the total number of OSPF packets received with an invalid authorization key since tmnxOspfAdminState was last set to 'enabled'.
badAreas	long	tmnxOspfShamIfBadAreas	The value of tmnxOspfShamIfBadAreas indicates the total number of OSPF packets received with an area mismatch since tmnxOspfAdminState was last set to 'enabled'.
badAuthorizationTypes	long	tmnxOspfShamIfBadAuthTypes	The value of tmnxOspfShamIfBadAuthTypes indicates the total number of OSPF packets received with an invalid authorization type since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badDeadIntervals	long	tmnxOspfShamIfBadDeadIntervals	The value of tmnxOspfShamIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this sham link since tmnxOspfAdminState was last set to 'enabled'.
badDestinationAddresses	long	tmnxOspfShamIfBadDstAddrs	The value of tmnxOspfShamIfBadDstAddrs indicates the total number of OSPF packets received with the incorrect IP destination address since tmnxOspfAdminState was last set to 'enabled'.
badHelloIntervals	long	tmnxOspfShamIfBadHelloIntervals	The value of tmnxOspfShamIfBadHelloIntervals indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this sham link since tmnxOspfAdminState was last set to 'enabled'.
badLengths	long	tmnxOspfShamIfBadLengths	The value of tmnxOspfShamIfBadLengths indicates the total number of OSPF packets received on this sham link with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.
badNeighbors	long	tmnxOspfShamIfBadNeighbors	The value of tmnxOspfShamIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the information this router has for the neighbor since tmnxOspfAdminState was last set to 'enabled'.
badNetworks	long	tmnxOspfShamIfBadNetworks	The value of tmnxOspfShamIfBadNetworks indicates the total number of OSPF packets received with invalid network or mask since tmnxOspfAdminState was last set to 'enabled'.
badOptions	long	tmnxOspfShamIfBadOptions	The value of tmnxOspfShamIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this sham link or area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfShamIfBadPacketTypes	The value of tmnxOspfShamIfBadPacketTypes indicates the total number of OSPF packets received with an invalid OSPF packet type since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badVersions	long	tmnxOspfShamIfBadVersions	The value of tmnxOspfShamIfBadVersions indicates the total number of OSPF packets received with bad OSPF version numbers since tmnxOspfAdminState was last set to 'enabled'.
discardPackets	long	tmnxOspfShamIfDiscardPackets	The value of tmnxOspfShamIfDiscardPackets indicates the total number of OSPF packets discarded on this sham link since tmnxOspfAdminState was last set to 'enabled'.
retransmitOuts	long	tmnxOspfShamIfRetransmitOuts	The value of tmnxOspfShamIfRetransmitOuts indicates the total number of OSPF Retransmits sent on this sham link since tmnxOspfAdminState was last set to 'enabled'.
ShamLinkTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamIfStatsTable Monitored class: ospf.ShamLink			
databaseDescriptionPackets	long	tmnxOspfShamIfRxDBDs	The value of tmnxOspfShamIfRxDBDs indicates the total number of OSPF Database Description packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfShamIfTxDBDs	The value of tmnxOspfShamIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfShamIfRxHellos	The value of tmnxOspfShamIfRxHellos indicates the total number of OSPF Hello packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfShamIfTxHellos	The value of tmnxOspfShamIfTxHellos indicates the total number of OSPF Hello packets transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfShamIfRxLSAcks	The value of tmnxOspfShamIfRxLSAcks indicates the total number of Link State Acknowledgements received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfShamIfTxLSAcks	The value of tmnxOspfShamIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfShamIfRxLSRs	The value of tmnxOspfShamIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this sham link since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateRequests	long	tmnxOspfShamIfTxLSRs	The value of tmnxOspfShamIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfShamIfRxLSUs	The value of tmnxOspfShamIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfShamIfTxLSUs	The value of tmnxOspfShamIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfShamIfRxPackets	The value of tmnxOspfShamIfRxPackets indicates the total number of OSPF packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfShamIfTxPackets	The value of tmnxOspfShamIfTxPackets indicates the total number of OSPF packets transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
SiteStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfStatisticsTable Monitored class: ospf.Site			
addRouteFailed	long	tmnxOspfRoutesAddsFailed	The value of tmnxOspfRoutesAddsFailed indicates the number of times an attempt to add a route to the Route Table Manager (RTM) failed for this OSPF instance.
cspfDroppedRequests	long	tmnxOspfCSPFDroppedRequests	The value of tmnxOspfCSPFDroppedRequests indicates the number of dropped CSPF requests made by the OSPF protocol.
cspfPathsFound	long	tmnxOspfCSPFPathsFound	The value of tmnxOspfCSPFPathsFound indicates the number of of paths found for the requests made to OSPF protocol.
cspfPathsNotFound	long	tmnxOspfCSPFPathsNotFound	The value of tmnxOspfCSPFPathsNotFound indicates the number of of paths not found for the requests made to OSPF protocol.
cspfRequests	long	tmnxOspfCSPFRequests	The value of tmnxOspfCSPFRequests indicates the number of CSPF requests made to the OSPF protocol.
deleteRouteFailed	long	tmnxOspfRoutesDelsFailed	The value of tmnxOspfRoutesDelsFailed indicates the number of times an attempt to delete a route from the Route Table Manager (RTM) failed for this instance of OSPF.
inOverflowCount	long	tmnxOspfNumTimesInOverflow	The value of tmnxOspfNumTimesInOverflow indicates the count of the number of times the system was in the overflow state.

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5620 SAM counter name	Type	MIB counter name	Description
inOverloadCount	long	tmnxOspfNumTimesInOverload	The value of tmnxOspfNumTimesInOverload indicates the count of the number of times the system was overloaded.
modifyRouteFailed	long	tmnxOspfRoutesModsFailed	The value of tmnxOspfRoutesModsFailed indicates the number of times an attempt to modify a route in the Route Table Manager (RTM) failed for this instance of OSPF.
newLsasOriginated	long	tmnxOspfOriginateNewLsas	The value of tmnxOspfOriginateNewLsas indicates the number of new link-state advertisements that have been originated. This number is incremented each time the router originates a new LSA.
newLsasReceived	long	tmnxOspfRxNewLsas	The value of tmnxOspfRxNewLsas indicates the number of link-state advertisements received determined to be new instantiations. This number does not include newer instantiations of self-originated link-state advertisements.
spfAttemptsFailed	long	tmnxOspfSpfAttemptsFailed	The value of tmnxOspfSpfAttemptsFailed indicates the number of times an attempt to run SPF has failed because SPF runs have been stopped as a result of insufficient memory resources.
VirtualLinkGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
events	long	tmnxOspfVirtIfEvents	The value of tmnxOspfVirtIfEvents indicates the number of state changes or error events on this Virtual Link.
VirtualLinkReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
databaseDescriptionPackets	long	tmnxOspfVirtIfRxDBDs	The value of tmnxOspfVirtIfRxDBDs indicates the total number of OSPF Database Description packets received on this virtual interface.
databaseDescriptionPackets	long	tmnxOspfVirtIfTxDBDs	The value of tmnxOspfVirtIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this virtual interface.
helloPackets	long	tmnxOspfVirtIfRxHellos	The value of tmnxOspfVirtIfRxHellos indicates the total number of OSPF Hello packets received on this virtual interface.
helloPackets	long	tmnxOspfVirtIfTxHellos	The value of tmnxOspfVirtIfTxHellos indicates the total number of OSPF Hello packets transmitted on this virtual interface since it was created.
linkStateAcknowledgements	long	tmnxOspfVirtIfRxLSAcks	The value of tmnxOspfVirtIfRxLSAcks indicates the total number of Link State Acknowledgements received on this virtual interface.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateAcknowledgements	long	tmnxOspfVirtIfTxLSAcks	The value of tmnxOspfVirtIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfRxLSRs	The value of tmnxOspfVirtIfRxLSRs indicates the total number of OSPF Link State Requests (LSRs) received on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfTxLSRs	The value of tmnxOspfVirtIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfRxLSUs	The value of tmnxOspfVirtIfRxLSUs indicates the total number of OSPF Link State Updates (LSUs) received on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfTxLSUs	The value of tmnxOspfVirtIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this virtual interface.
lsasWithBadChecksums	long	tmnxOspfVirtIfRxBadChecksums	The value of tmnxOspfVirtIfRxBadChecksums indicates the count of LSAs received with bad checksums.
totalPackets	long	tmnxOspfVirtIfRxPackets	The value of tmnxOspfVirtIfRxPackets indicates the total number of OSPF packets received on this virtual interface since it was created.
totalPackets	long	tmnxOspfVirtIfTxPackets	The value of tmnxOspfVirtIfTxPackets indicates the total number of OSPF packets transmitted on this virtual interface since it was created.
VirtualLinkStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
authorizationFailures	long	tmnxOspfVirtIfAuthFailures	The value of tmnxOspfVirtIfAuthFailures indicates the total number of OSPF packets received on this virtual interface with invalid authentication keys.
badAreas	long	tmnxOspfVirtIfBadAreas	The value of tmnxOspfVirtIfBadAreas indicates the total number of OSPF packets received on this virtual interface with area mismatches.
badAuthorizationTypes	long	tmnxOspfVirtIfBadAuthTypes	The value of tmnxOspfVirtIfBadAuthTypes indicates the total number of OSPF packets received on this virtual interface with invalid authentication types.
badDeadIntervals	long	tmnxOspfVirtIfBadDeadIntervals	The value of tmnxOspfVirtIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this virtual interface since tmnxOspfAdminState was last set to 'enabled'.

5620 SAM counter name	Type	MIB counter name	Description
badDestinationAddresses	long	tmnxOspfVirtIfBadDstAddrs	The value of tmnxOspfVirtIfBadDstAddrs indicates the total number of OSPF packets received on this virtual interface with invalid destination IP address.
badHelloIntervals	long	tmnxOspfVirtIfBadHelloIntervls	The value of tmnxOspfVirtIfBadHelloIntervls indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this virtual interface since tmnxOspfAdminState was last set to 'enabled'.
badLengths	long	tmnxOspfVirtIfBadLengths	The value of tmnxOspfVirtIfBadLengths indicates the total number of OSPF packets received on this virtual interface with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.
badNeighbors	long	tmnxOspfVirtIfBadNeighbors	The value of tmnxOspfVirtIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the configuration this router has for the neighbor.
badNetworks	long	tmnxOspfVirtIfBadNetworks	The value of tmnxOspfVirtIfBadNetworks indicates the total number of OSPF packets received on this virtual interface with invalid network or mask fields.
badOptions	long	tmnxOspfVirtIfBadOptions	The value of tmnxOspfVirtIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this virtual interface or transit-area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfVirtIfBadPacketTypes	The value of tmnxOspfVirtIfBadPacketTypes indicates the total number of OSPF packets received on this virtual interface with invalid OSPF packet types.
badVersions	long	tmnxOspfVirtIfBadVersions	The value of tmnxOspfVirtIfBadVersions indicates the total number of OSPF packets received on this virtual interface with invalid OSPF version numbers.
discardPackets	long	tmnxOspfVirtIfDiscardPackets	The value of tmnxOspfVirtIfDiscardPackets indicates the total number of OSPF packets discarded on this virtual interface.
retransmitOuts	long	tmnxOspfVirtIfRetransmitOuts	The value of tmnxOspfVirtIfRetransmitOuts indicates the total number of OSPF packets retransmitted on this virtual interface.
VirtualLinkTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			

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5620 SAM counter name	Type	MIB counter name	Description
databaseDescriptionPackets	long	tmnxOspfVirtIfRxDBDs	The value of tmnxOspfVirtIfRxDBDs indicates the total number of OSPF Database Description packets received on this virtual interface.
databaseDescriptionPackets	long	tmnxOspfVirtIfTxDBDs	The value of tmnxOspfVirtIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this virtual interface.
helloPackets	long	tmnxOspfVirtIfRxHellos	The value of tmnxOspfVirtIfRxHellos indicates the total number of OSPF Hello packets received on this virtual interface.
helloPackets	long	tmnxOspfVirtIfTxHellos	The value of tmnxOspfVirtIfTxHellos indicates the total number of OSPF Hello packets transmitted on this virtual interface since it was created.
linkStateAcknowledgements	long	tmnxOspfVirtIfRxLSAcks	The value of tmnxOspfVirtIfRxLSAcks indicates the total number of Link State Acknowledgements received on this virtual interface.
linkStateAcknowledgements	long	tmnxOspfVirtIfTxLSAcks	The value of tmnxOspfVirtIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfRxLSRs	The value of tmnxOspfVirtIfRxLSRs indicates the total number of OSPF Link State Requests (LSRs) received on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfTxLSRs	The value of tmnxOspfVirtIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfRxLSUs	The value of tmnxOspfVirtIfRxLSUs indicates the total number of OSPF Link State Updates (LSUs) received on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfTxLSUs	The value of tmnxOspfVirtIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this virtual interface.
totalPackets	long	tmnxOspfVirtIfRxPackets	The value of tmnxOspfVirtIfRxPackets indicates the total number of OSPF packets received on this virtual interface since it was created.
totalPackets	long	tmnxOspfVirtIfTxPackets	The value of tmnxOspfVirtIfTxPackets indicates the total number of OSPF packets transmitted on this virtual interface since it was created.
VirtualNeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtNbrStatsTable Monitored class: ospf.VirtualNeighbor			
events	long	tmnxOspfVirtNbrEvents	The value of tmnxOspfVirtNbrEvents indicates the number of times this virtual link has changed its state, or an error has occurred.

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5620 SAM counter name	Type	MIB counter name	Description
retransmissionQueueLength	long	tmnxOspfVirtNbrLsRetransQLen	The value of tmnxOspfVirtNbrLsRetransQLen indicates the current length of the retransmission queue.
VirtualNeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtNbrStatsTable Monitored class: ospf.VirtualNeighbor			
badMtus	long	tmnxOspfVirtNbrBadMTUs	The value of tmnxOspfVirtNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfVirtNbrBadPackets	The value of tmnxOspfVirtNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfVirtNbrBadSeqNums	The value of tmnxOspfVirtNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
badVirtualNeighborStates	long	tmnxOspfVirtNbrBadNbrStates	The value of tmnxOspfVirtNbrBadNbrStates indicates the total number of OSPF packets received when the virtual neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
duplicates	long	tmnxOspfVirtNbrDuplicates	The value of tmnxOspfVirtNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfVirtNbrLsaInstallFail	The value of tmnxOspfVirtNbrLsaInstallFail indicates the total number of times when an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfVirtNbrLsaNotInLsdbs	The value of tmnxOspfVirtNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.

5620 SAM counter name	Type	MIB counter name	Description
numberOfRestarts	long	tmnxOspfVirtNbrNumRestarts	The value of tmnxOspfVirtNbrNumRestarts indicates the number of times the virtual neighbor has attempted restart since tmnxOspfAdminState was last set to 'enabled'.
optionMismatches	long	tmnxOspfVirtNbrOptionMismatch	The value of tmnxOspfVirtNbrOptionMismatch indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.

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Table H-25 pae802_1x statistics

5620 SAM counter name	Type	MIB counter name	Description
PaePortAuthenticatorDiagStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthDiagTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthAuthEapLogoffWhileAuthenticated	long	dot1xAuthAuthEapLogoffWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to DISCONNECTED, as a result of an EAPOL-Logoff message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.12.
dot1xAuthAuthEapLogoffWhileAuthenticating	long	dot1xAuthAuthEapLogoffWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of an EAPOL-Logoff message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.9.
dot1xAuthAuthEapStartsWhileAuthenticated	long	dot1xAuthAuthEapStartsWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to CONNECTING, as a result of an EAPOL-Start message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.11.
dot1xAuthAuthEapStartsWhileAuthenticating	long	dot1xAuthAuthEapStartsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of an EAPOL-Start message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.8.
dot1xAuthAuthFailWhileAuthenticating	long	dot1xAuthAuthFailWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to HELD, as a result of the Backend Authentication state machine indicating authentication failure (authFail = TRUE). REFERENCE 9.4.2, 8.5.4.2.6.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthAuthReauthsWhileAuthenticated	long	dot1xAuthAuthReauthsWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to CONNECTING, as a result of a reauthentication request (reAuthenticate = TRUE). REFERENCE 9.4.2, 8.5.4.2.10.
dot1xAuthAuthReauthsWhileAuthenticating	long	dot1xAuthAuthReauthsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of a reauthentication request (reAuthenticate = TRUE). REFERENCE 9.4.2, 8.5.4.2.7.
dot1xAuthAuthSuccessWhileAuthenticating	long	dot1xAuthAuthSuccessWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to AUTHENTICATED, as a result of the Backend Authentication state machine indicating successful authentication of the Supplicant (authSuccess = TRUE). REFERENCE 9.4.2, 8.5.4.2.4.
dot1xAuthAuthTimeoutsWhileAuthenticating	long	dot1xAuthAuthTimeoutsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of the Backend Authentication state machine indicating authentication timeout (authTimeout = TRUE). REFERENCE 9.4.2, 8.5.4.2.5.
dot1xAuthBackendAccessChallenges	long	dot1xAuthBackendAccessChallenges	Counts the number of times that the state machine receives an initial Access-Challenge packet from the Authentication server (i.e., aReq becomes TRUE, causing exit from the RESPONSE state). Indicates that the Authentication Server has communication with the Authenticator. REFERENCE 9.4.2, 8.5.6.2.2.
dot1xAuthBackendAuthFails	long	dot1xAuthBackendAuthFails	Counts the number of times that the state machine receives an EAP-Failure message from the Authentication Server (i.e., aFail becomes TRUE, causing a transition from RESPONSE to FAIL). Indicates that the Supplicant has not authenticated to the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.6.
dot1xAuthBackendAuthSuccesses	long	dot1xAuthBackendAuthSuccesses	Counts the number of times that the state machine receives an EAP-Success message from the Authentication Server (i.e., aSuccess becomes TRUE, causing a transition from RESPONSE to SUCCESS). Indicates that the Supplicant has successfully authenticated to the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.5.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthBackendNonNakResponsesFromSupplicant	long	dot1xAuthBackendNonNakResponsesFromSupplicant	Counts the number of times that the state machine receives a response from the Supplicant to an initial EAP-Request, and the response is something other than EAP-NAK (i.e., rxResp becomes TRUE, causing the state machine to transition from REQUEST to RESPONSE, and the response is not an EAP-NAK). Indicates that the Supplicant can respond to the Authenticator's chosen EAP-method. REFERENCE 9.4.2, 8.5.6.2.4.
dot1xAuthBackendOtherRequestsToSupplicant	long	dot1xAuthBackendOtherRequestsToSupplicant	Counts the number of times that the state machine sends an EAP-Request packet (other than an Identity, Notification, Failure or Success message) to the Supplicant (i.e., executes txReq on entry to the REQUEST state). Indicates that the Authenticator chose an EAP-method. REFERENCE 9.4.2, 8.5.6.2.3.
dot1xAuthBackendResponses	long	dot1xAuthBackendResponses	Counts the number of times that the state machine sends an initial Access-Request packet to the Authentication server (i.e., executes sendRespToServer on entry to the RESPONSE state). Indicates that the Authenticator attempted communication with the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.1.
dot1xAuthEapLogoffsWhileConnecting	long	dot1xAuthEapLogoffsWhileConnecting	Counts the number of times that the state machine transitions from CONNECTING to DISCONNECTED as a result of receiving an EAPOL-Logoff message. REFERENCE 9.4.2, 8.5.4.2.2.
dot1xAuthEntersAuthenticating	long	dot1xAuthEntersAuthenticating	Counts the number of times that the state machine transitions from CONNECTING to AUTHENTICATING, as a result of an EAP-Response/Identity message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.3.
dot1xAuthEntersConnecting	long	dot1xAuthEntersConnecting	Counts the number of times that the state machine transitions to the CONNECTING state from any other state. REFERENCE 9.4.2, 8.5.4.2.1.
PaePortAuthenticatorSessionStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthSessionStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthSessionAuthenticMethod	int	dot1xAuthSessionAuthenticMethod	The authentication method used to establish the session. REFERENCE 9.4.4, Session Authentication Method.
dot1xAuthSessionFramesRx	long	dot1xAuthSessionFramesRx	The number of user data frames received on this Port during the session. REFERENCE 9.4.4, Session Frames Received.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthSessionFramesTx	long	dot1xAuthSessionFramesTx	The number of user data frames transmitted on this Port during the session. REFERENCE 9.4.4, Session Frames Transmitted.
dot1xAuthSessionOctetsRx	UINT128	dot1xAuthSessionOctetsRx	The number of octets received in user data frames on this Port during the session. REFERENCE 9.4.4, Session Octets Received.
dot1xAuthSessionOctetsTx	UINT128	dot1xAuthSessionOctetsTx	The number of octets transmitted in user data frames on this Port during the session. REFERENCE 9.4.4, Session Octets Transmitted.
dot1xAuthSessionTerminateCause	int	dot1xAuthSessionTerminateCause	The reason for the session termination. REFERENCE 9.4.4, Session Terminate Cause.
dot1xAuthSessionTime	long	dot1xAuthSessionTime	The duration of the session in seconds. REFERENCE 9.4.4, Session Time.
PaePortAuthenticatorStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthEapLengthErrorFramesRx	long	dot1xAuthEapLengthErrorFramesRx	The number of EAPOL frames that have been received by this Authenticator in which the Packet Body Length field is invalid. REFERENCE 9.4.2, EAP length error frames received.
dot1xAuthEapolFramesRx	long	dot1xAuthEapolFramesRx	The number of valid EAPOL frames of any type that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL frames received.
dot1xAuthEapolFramesTx	long	dot1xAuthEapolFramesTx	The number of EAPOL frames of any type that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL frames transmitted.
dot1xAuthEapolLogoffFramesRx	long	dot1xAuthEapolLogoffFramesRx	The number of EAPOL Logoff frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Logoff frames received.
dot1xAuthEapolReqFramesTx	long	dot1xAuthEapolReqFramesTx	The number of EAP Request frames (other than Rq/Id frames) that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL Request frames transmitted.
dot1xAuthEapolReqIdFramesTx	long	dot1xAuthEapolReqIdFramesTx	The number of EAP Req/Id frames that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL Req/Id frames transmitted.
dot1xAuthEapolRespFramesRx	long	dot1xAuthEapolRespFramesRx	The number of valid EAP Response frames (other than Resp/Id frames) that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Response frames received.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthEapolRespIdFramesRx	long	dot1xAuthEapolRespIdFramesRx	The number of EAP Resp/Id frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Resp/Id frames received.
dot1xAuthEapolStartFramesRx	long	dot1xAuthEapolStartFramesRx	The number of EAPOL Start frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Start frames received.
dot1xAuthInvalidEapolFramesRx	long	dot1xAuthInvalidEapolFramesRx	The number of EAPOL frames that have been received by this Authenticator in which the frame type is not recognized. REFERENCE 9.4.2, Invalid EAPOL frames received.
dot1xAuthLastEapolFrameVersion	long	dot1xAuthLastEapolFrameVersion	The protocol version number carried in the most recently received EAPOL frame. REFERENCE 9.4.2, Last EAPOL frame version.

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Table H-26 pim statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceAdditionalStats MIB table name: TIMETRA-PIM-NG-MIB.vRtrPimNgIfStatsTable Monitored class: pim.Interface			
bootstrapExpPolicyDrops	long	vRtrPimNgIfBtrExpPolicyDrops	The value of vRtrPimNgIfBtrExpPolicyDrops indicates the number of Bootstrap Messages that were not transmitted on this interface because of Bootstrap export policy. PIM Bootstrap export policies are configured using bootstrap export policy objects in vRtrPimNgGenPolicyTable.
bootstrapImpPolicyDrops	long	vRtrPimNgIfBtrImpPolicyDrops	The value of vRtrPimNgIfBtrImpPolicyDrops indicates the number of Bootstrap Messages received on this interface but were dropped because of Bootstrap import policy. PIM Bootstrap import policies are configured using bootstrap import policy objects in vRtrPimNgGenPolicyTable.
joinPolicyDrops	long	vRtrPimNgIfJoinPolicyDrops	The value of vRtrPimNgIfJoinPolicyDrops indicates the number of times the join policy match resulted in dropping PIM Join-Prune Message or one of the source group contained in the message. PIM Join policies are configured using join policy objects in vRtrPimNgGenPolicyTable.
registerPolicyDrops	long	vRtrPimNgIfRegisterPolicyDrops	The value of vRtrPimNgIfRegisterPolicyDrops indicates the number of times the register policy match resulted in dropping PIM Register Message. PIM Register policies are configured using the register policy objects in vRtrPimNgGenPolicyTable.

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5620 SAM counter name	Type	MIB counter name	Description
rxBSMNoRouterAlertDrops	long	vRtrPimNgIfRxBSMNoRouterAlertDrops	The value of vRtrPimNgIfRxBSMNoRouterAlertDrops indicates the number of BSM messages that were dropped because router alert option was not present.
rxBSMWrongIfDrops	long	vRtrPimNgIfRxBSMWrongIfDrops	The value of vRtrPimNgIfRxBSMWrongIfDrops indicates the number of BSM messages that were dropped either because they were not sent by the correct RPF neighbor or because they arrived on the wrong interface.
rxInvalidJoinPrunes	long	vRtrPimNgIfRxInvalidJoinPrunes	The value of vRtrPimNgIfRxInvalidJoinPrunes indicates the number of invalid PIM Join Prune messages received on this interface. A Join Prune message is invalid when the RP address in the message is not the RP for the group specified in the message. If such a message arrives, a vRtrPimNgInvalidJoinPrune notification is sent.
rxInvalidRegisters	long	vRtrPimNgIfRxInvalidRegisters	The value of vRtrPimNgIfRxInvalidRegisters indicates the number of invalid PIM Register messages received on this interface. A Register message is invalid when the RP address in the message is not the RP for the group specified in the message. If such a message arrives, a vRtrPimNgInvalidRegister notification is sent.
rxJoinPruneErrs	long	vRtrPimNgIfRxJoinPruneErrs	The value of vRtrPimNgIfRxJoinPruneErrs indicates the number of errors while processing Join-Prune messages received on this interface.
rxJoinPrunes	long	vRtrPimNgIfRxJoinPrunes	The value of vRtrPimNgIfRxJoinPrunes indicates the number of PIM Join Prune messages received on this interface.
txJoinPrunes	long	vRtrPimNgIfTxJoinPrunes	The value of vRtrPimNgIfTxJoinPrunes indicates the number of PIM Join Prune messages transmitted on this interface.
InterfaceStats MIB table name: TIMETRA-PIM-NG-MIB.vRtrPimNgIfStatsTable Monitored classes: • pim.Interface • pim.InterfaceExtension			
bsmErrs	long	vRtrPimNgIfTxBsmErrs	The value of vRtrPimNgIfTxBsmErrs indicates the number of errors while transmitting PIM Bootstrap Messages (BSM) on this interface.
bsmPdus	long	vRtrPimNgIfTxBsmPdus	The value of vRtrPimNgIfTxBsmPdus indicates the number of PIM Bootstrap Messages (BSM) transmitted on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
mcacPolicyDrops	long	vRtrPimNgIfMcacPolicyDrops	The value of the object vRtrPimNgIfMcacPolicyDrops indicates the number times a PIM Group is dropped because of applying a multicast CAC policy on this interface.
registerStopErrs	long	vRtrPimNgIfTxRegisterStopErrs	The value of vRtrPimNgIfTxRegisterStopErrs indicates the number of PIM errors while trasmitting PIM Register Stop messages on this interface.
registerStops	long	vRtrPimNgIfTxRegisterStops	The value of vRtrPimNgIfTxRegisterStops indicates the number of PIM Register Stop messages transmitted on this interface.
rxAssertErrs	long	vRtrPimNgIfRxAssertErrs	The value of vRtrPimNgIfRxAssertErrs indicates the number of errors while processing Assert messages received on this interface.
rxAsserts	long	vRtrPimNgIfRxAsserts	The value of vRtrPimNgIfRxAsserts indicates the number of PIM Assert messages received on this interface.
rxBadChecksumDiscards	long	vRtrPimNgIfRxBadChecksumDiscard	The value of vRtrPimNgIfRxBadChecksumDiscard indicates the number of PIM messages received on this interface which were discarded because of bad checksum.
rxBadEncodings	long	vRtrPimNgIfRxBadEncodings	The value of vRtrPimNgIfRxBadEncodings indicates the number of PIM messages with bad encodings received on this interface.
rxBadVersionDiscards	long	vRtrPimNgIfRxBadVersionDiscard	The value of vRtrPimNgIfRxBadVersionDiscard indicates the number of PIM messages with bad versions received on this interface.
rxBsmPduDrops	long	vRtrPimNgIfRxBsmPduDrops	The value of vRtrPimNgIfRxBsmPduDrops indicates the number of Bootstrap Messages received on this interface but were dropped.
rxBsmPdus	long	vRtrPimNgIfRxBsmPdus	The value of vRtrPimNgIfRxBsmPdus indicates the number of Bootstrap Messages received on this interface.
rxCRPAdvNoRouterAlert	long	vRtrPimNgIfRxCRPAdvNoRtrAlert	The value of vRtrPimNgIfRxCRPAdvNoRtrAlert indicates the number of Candidate-RP Advertizements(C-RP-Adv) received on this interface which had no router alert option set.
rxHellos	long	vRtrPimNgIfRxHellos	The value of vRtrPimNgIfRxHellos indicates the number of PIM hello messages received on this interface.
rxHellosDropped	long	vRtrPimNgIfRxHellosDropped	The value of vRtrPimNgIfRxHellosDropped indicates the number of PIM Hello messages which were received on this interface but were dropped.

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5620 SAM counter name	Type	MIB counter name	Description
rxNbrUnknown	long	vRtrPimNgIfRxNbrUnknown	The value of vRtrPimNgIfRxNbrUnknown indicates the number of PIM messages (other than Hello messages) which were received on this interface and were rejected because the adjacency with the neighbor router was not already established.
rxNullRegisters	long	vRtrPimNgIfRxNullRegisters	The value of vRtrPimNgIfRxNullRegisters indicates the number of PIM Null Register messages received on this interface.
rxPkts	long	vRtrPimNgIfRxPkts	The value of vRtrPimNgIfRxPkts indicates the number of multicast data packets received on this interface.
rxRegisterErrs	long	vRtrPimNgIfRxRegisterErrs	The value of vRtrPimNgIfRxRegisterErrs indicates the number of errors while processing Register messages received on this interface.
rxRegisters	long	vRtrPimNgIfRxRegisters	The value of vRtrPimNgIfRxRegisters indicates the number of PIM Register messages received on this interface.
rxRegisterStopErrs	long	vRtrPimNgIfRxRegisterStopErrs	The value of vRtrPimNgIfRxRegisterStopErrs indicates the number of errors while processing Register Stop messages received on this interface.
rxRegisterStops	long	vRtrPimNgIfRxRegisterStops	The value of vRtrPimNgIfRxRegisterStops indicates the number of PIM Register Stop messages received on this interface.
rxUnknownPdus	long	vRtrPimNgIfRxUnknownPdus	The value of vRtrPimNgIfRxUnknownPdus indicates the number of packets received with an unsupported PIM type.
sgTypes	long	vRtrPimNgIfSGTypes	The value of vRtrPimNgIfSGTypes indicates the number of entries in vRtrPimNgIfGrpSrcTable for which vRtrPimNgIfGrpSrcType is 'sg'.
starGTypes	long	vRtrPimNgIfStarGTypes	The value of vRtrPimNgIfStarGTypes indicates the number of entries in vRtrPimNgIfGrpSrcTable for which vRtrPimNgIfGrpSrcType is 'starG'.
starStarRPTypes	long	vRtrPimNgIfStarStarRPTypes	The value of vRtrPimNgIfStarStarRPTypes indicates the number of entries in vRtrPimNgIfGrpSrcTable for which vRtrPimNgIfGrpSrcType is 'starStarRP'.
txAsserts	long	vRtrPimNgIfTxAsserts	The value of vRtrPimNgIfTxAsserts indicates the number of PIM Assert messages transmitted on this interface.
txHellos	long	vRtrPimNgIfTxHellos	The value of vRtrPimNgIfTxHellos indicates the number of PIM Hello messages transmitted on this interface.
txPkts	long	vRtrPimNgIfTxPkts	The value of vRtrPimNgIfTxPkts indicates the number of multicast data packets transmitted on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
PimGenSiteStats MIB table name: TIMETRA-PIM-NG-MIB.vRtrPimNgGenStatTable Monitored classes: • pim.Site • pim.SiteExtension			
forwardCrpaDrops	long	vRtrPimNgGenStatFwdCrpaDrops	The value of vRtrPimNgGenStatFwdCrpaDrops indicates the number of times the Candidate-RP Advertizements(C-RP-Adv) could not be forwarded by the router.
forwardCrpaPdus	long	vRtrPimNgGenStatForwardCrpaPdus	The value of vRtrPimNgGenStatForwardCrpaPdus indicates the number of Candidate-RP Advertizements(C-RP-Adv) that were forwarded by the router. C-RP-Adv's are forwarded when the received advertizement has a router alert set and the destination address is not the router's local address.
rxActiveMdts	long	vRtrPimNgGenStatRxActiveMdts	The value of vRtrPimNgGenStatRxActiveMdts indicates number of active Mdts on which the PE is receiving packets. This object is applicable to VPRNs only.
rxCrpaPduDrops	long	vRtrPimNgGenStatRxCrpaPduDrops	The value of vRtrPimNgGenStatRxCrpaPduDrops indicates the number of PIM Candidate-RP Advertizements (C-RP-Adv) received by this instance, but were dropped.
rxCrpaPdus	long	vRtrPimNgGenStatRxCrpaPdus	The value of vRtrPimNgGenStatRxCrpaPdus indicates the number of PIM Candidate-RP Advertizements (C-RP-Adv) received by this instance.
rxMdtJoinTlvErrs	long	vRtrPimNgGenStatRxMdtJnTlvErrs	The value of vRtrPimNgGenStatRxMdtJnTlvErrs indicates indicates number of times MDT Join TLVs were dropped due to errors in the received TLV.
rxMdtJoinTlvs	long	vRtrPimNgGenStatRxMdtJoinTlvs	The value of vRtrPimNgGenStatRxMdtJoinTlvs indicates the number of times MDT Join TLV were received.
sgTypes	long	vRtrPimNgGenStatSGTypes	The value of vRtrPimNgGenStatSGTypes indicates the number of entries in vRtrPimNgGrpSrcTable for which vRtrPimNgGrpSrcType is 'sg'.
starGTypes	long	vRtrPimNgGenStatStarGTypes	The value of vRtrPimNgGenStatStarGTypes indicates the number of entries in vRtrPimNgGrpSrcTable for which vRtrPimNgGrpSrcType is 'starG'.

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5620 SAM counter name	Type	MIB counter name	Description
starStarRPTypes	long	vRtrPimNgGenStatStarStarRPTypes	The value of vRtrPimNgGenStatStarStarRPTypes indicates the number of entries in vRtrPimNgGrpSrcTable for which vRtrPimNgGrpSrcType is 'starStarRP'.
txActiveMdts	long	vRtrPimNgGenStatTxActiveMdts	The value of vRtrPimNgGenStatTxActiveMdts indicates the number of active MDTs on which the PE is forwarding packets. This object is applicable to VPRNs only.
txCrpaPduErrs	long	vRtrPimNgGenStatTxCrpaPduErrs	The value of vRtrPimNgGenStatTxCrpaPduErrs indicates the number of errors while transmitting PIM Candidate-RP Advertizements (C-RP-Adv).
txCrpaPdus	long	vRtrPimNgGenStatTxCrpaPdus	The value of vRtrPimNgGenStatTxCrpaPdus indicates the number of PIM Candidate-RP Advertisements (C-RP-Adv) transmitted by this router instance.
txMdtJoinTlvErrs	long	vRtrPimNgGenStatTxMdtJnTlvErrs	The value of vRtrPimNgGenStatTxMdtJnTlvErrs indicates indicates the number of times MDT Join TLV could not be transmitted.
txMdtJoinTlvs	long	vRtrPimNgGenStatTxMdtJoinTlvs	The value of vRtrPimNgGenStatTxMdtJoinTlvs indicates the number of times MDT Join TLV were transmitted.
txNullRegisters	long	vRtrPimNgGenStatTxNullRegisters	The value of vRtrPimNgGenStatTxNullRegisters indicates the number of PIM Null Register messages transmitted by this instance.
txRegisterErrs	long	vRtrPimNgGenStatTxRegisterErrs	The value of vRtrPimNgGenStatTxRegisterErrs indicates the number the times there was an error while transmitting PIM Register messages by this instance.
txRegisters	long	vRtrPimNgGenStatTxRegisters	The value of vRtrPimNgGenStatTxRegisters indicates the number of PIM Register messages transmitted by this instance.
txRegisterTTLDrops	long	vRtrPimNgGenStatTxRegTTLDrops	The value of vRtrPimNgGenStatTxRegTTLDrops indicates the number of multicast data packets which could not be encapsulated in Register messages because the Time To Live (TTL) was zero.
PimGroupStats MIB table name: TIMETRA-PIM-NG-MIB.vRtrPimNgGrpSrcStatTable Monitored class: pim.Groups			

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5620 SAM counter name	Type	MIB counter name	Description
discardedPkts	UINT128	vRtrPimNgGrpSrcStatDscrdPkts	The value of vRtrPimNgGrpSrcStatDscrdPkts indicates the number of multicast packets that matched this source group entry but were discarded. For (S,G) entries, if the traffic is getting forwarded on the SPT, the packets arriving from the RPT will be discarded.
forwardedOctets	UINT128	vRtrPimNgGrpSrcStatFrdedOct	The value of vRtrPimNgGrpSrcStatFrdedOct indicates the number of multicast octets that were forwarded to the interfaces in the outgoing interface list. vRtrPimNgGrpSrcIfTable lists all the interfaces in the outgoing interface list.
forwardedPkts	UINT128	vRtrPimNgGrpSrcStatFrwdedPkts	The value of vRtrPimNgGrpSrcStatFrwdedPkts indicates the number of multicast packets that were forwarded to the interfaces in the outgoing interface list. vRtrPimNgGrpSrcIfTable lists all the interfaces in the outgoing interface list.
rpfMismatches	UINT128	vRtrPimNgGrpSrcStatRPFMsmtch	The value of vRtrPimNgGrpSrcStatRPFMsmtch indicates the number of multicast packets that matched this source group entry but they did not arrive on the the interface indicated by vRtrPimNgGrpSrcRpfIfIndex.

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Table H-27 ppp statistics

5620 SAM counter name	Type	MIB counter name	Description
PppStats MIB table name: TIMETRA-PPP-MIB.tmnxPppTable Monitored class: ppp.Interface			
keepaliveEchoReplyPacketsReceived	long	tmnxPppKaInPktCount	The number of echo-reply packets received.
keepaliveEchoRequestPacketsSent	long	tmnxPppKaOutPktCount	The number of echo-request packets sent.
keepaliveThresholdExceedsCount	long	tmnxPppKaThresholdExceedsCount	The number of times that tmnxPppKaDropCount was reached.
lqmInRate	long	tmnxPppLqmInRate	The average of 'SaveInPackets'/'PeerOutPackets' in the last five consecutive LQRs received.
lqmLqrPacketsReceived	long	tmnxPppLqmInPktCount	The number of LQR packets received.
lqmLqrPacketsSent	long	tmnxPppLqmOutPktCount	The number of LQR packets sent.
lqmOutRate	long	tmnxPppLqmOutRate	The average of 'PeerInPackets'/'LastOutPackets' in the last five consecutive LQRs received.

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5620 SAM counter name	Type	MIB counter name	Description
lqmThresholdExceedsCount	long	tmnxPppLqmThresholdExceedsCount	The number of times that either tmnxPppLqmInRate or tmnxPppLqmOutRate falls below the specified quality percentage when PPP quality or LQM is enforced.

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Table H-28 radiusaccounting statistics

5620 SAM counter name	Type	MIB counter name	Description
PolicyStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAcctPlcyStatsTable Monitored class: radiusaccounting.Policy			
receiveResponses	long	tmnxSubAcctPlcyRxResponses	The value of tmnxSubAcctPlcyRxResponses indicates the number of accounting responses received for this policy.
requestRetries	long	tmnxSubAcctPlcySendRetries	The value of tmnxSubAcctPlcySendRetries indicates the number of retries to a different server for a single accounting request for this policy.
requestsFail	long	tmnxSubAcctPlcySendFail	The value of tmnxSubAcctPlcySendFail indicates how many accounting requests failed because the packet could not be sent out.
requestTimeOut	long	tmnxSubAcctPlcyReqTimeouts	The value of tmnxSubAcctPlcyReqTimeouts indicates the number of accounting requests which have timed out for this policy.
transferRequests	long	tmnxSubAcctPlcyTxRequests	The value of tmnxSubAcctPlcyTxRequests indicates the number of accounting requests transmitted for this policy.
RadiusEntryStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAcctPlcyRadStatsTable Monitored class: radiusaccounting.RadiusEntry			
receiveResponses	long	tmnxSubAcctPlcyRadRxResponses	The value of tmnxSubAcctPlcyRadRxResponses indicates the number of accounting responses received for this server.
requestsFail	long	tmnxSubAcctPlcyRadReqSendFail	The value of tmnxSubAcctPlcyRadReqSendFail indicates the number of accounting requests failed because the packet could not be sent out.
requestTimeOut	long	tmnxSubAcctPlcyRadReqTimeouts	The value of tmnxSubAcctPlcyRadReqTimeouts indicates the number of accounting requests which have timed out for this server.

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5620 SAM counter name	Type	MIB counter name	Description
transferRequests	long	tmnxSubAcctPlcyRadTxRequests	The value of tmnxSubAcctPlcyRadTxRequests indicates the number of accounting requests transmitted for this server.

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Table H-29 ressubscr statistics

5620 SAM counter name	Type	MIB counter name	Description
HostTrackStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubHostTrkStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
sapInnerEncapValue	long	sapEncapValue	—
sapPortId	String	sapPortId	—
serviceId	long	svcId	—
statsType	int	tmnxSubHostTrkStatsType	The value of tmnxSubHostTrkStatsType indicates the type of host tracking statistics contained in tmnxSubHostTrkStatsVal.
statsValue	long	tmnxSubHostTrkStatsVal	The value of tmnxSubHostTrkStatsType indicates the value of the host tracking statistics of the type indicated by tmnxSubHostTrkStatsType, for this subscriber host.
subscriberHostAddress	String	tmnxSubHostInfoV2IpAddress	The value of tmnxSubHostInfoV2IpAddress specifies the IP address of this subscriber host.
subscriberHostAddressType	int	tmnxSubHostInfoV2IpAddressType	The value of tmnxSubHostInfoV2IpAddressType specifies the type of address stored in tmnxSubHostInfoV2IpAddress.
subscrIdent	String	tmnxSubInfoSubIdent	The value of tmnxSubInfoSubIdent specifies the subscriber identification of this subscriber.
HostTrackStatsOnSap MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubHostSapTrkStatsTable Monitored classes: • vpls.L2AccessInterface • vprn.ServiceAccessPoint • ies.ServiceAccessPoint			
statsType	int	tmnxSubHostSapTrkStatsType	The value of tmnxSubHostSapTrkStatsType indicates the type of host tracking statistics contained in tmnxSubHostSapTrkStatsVal.
statsValue	long	tmnxSubHostSapTrkStatsVal	The value of tmnxSubHostSapTrkStatsType indicates the value of the host tracking statistics of the type indicated by tmnxSubHostSapTrkStatsType, for this host.

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5620 SAM counter name	Type	MIB counter name	Description
subscriberHostAddress	String	tmnxSubHostSapTrkHostAddr	The value of tmnxSubHostSapTrkHostAddr indicates the address of the host.
subscriberHostAddressType	int	tmnxSubHostSapTrkHostAddrType	The value of tmnxSubHostSapTrkHostAddrType indicates the address type of tmnxSubHostSapTrkHostAddr.
SLAProfInstEgrQStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSLAProfInstEgrQStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
egrQStatsDropInProfileOctets	UINT128	tmnxSPIEgrQStatsDropInProfOctets	The value of tmnxSPIEgrQStatsDropInProfOctets indicates the number of in-profile octets discarded by the egress Qchip.
egrQStatsDropInProfilePackets	UINT128	tmnxSPIEgrQStatsDropInProfPkts	The value of tmnxSPIEgrQStatsDropInProfPkts indicates the number of in-profile packets discarded by the egress Qchip.
egrQStatsDropOutProfileOctets	UINT128	tmnxSPIEgrQStatsDropOutProfOctets	The value of tmnxSPIEgrQStatsDropOutProfOctets indicates the number of out-of-profile octets discarded by the egress Qchip.
egrQStatsDropOutProfilePackets	UINT128	tmnxSPIEgrQStatsDropOutProfPkts	The value of tmnxSPIEgrQStatsDropOutProfPkts indicates the number of out-of-profile packets discarded by the egress Qchip.
egrQStatsFwdInProfileOctets	UINT128	tmnxSPIEgrQStatsFwdInProfOctets	The value of tmnxSPIEgrQStatsFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
egrQStatsFwdInProfilePackets	UINT128	tmnxSPIEgrQStatsFwdInProfPkts	The value of tmnxSPIEgrQStatsFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
egrQStatsFwdOutProfileOctets	UINT128	tmnxSPIEgrQStatsFwdOutProfOctets	The value of tmnxSPIEgrQStatsFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
egrQStatsFwdOutProfilePackets	UINT128	tmnxSPIEgrQStatsFwdOutProfPkts	The value of tmnxSPIEgrQStatsFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
egrQStatsQueueId	long	tmnxSPIEgrQStatsQueueId	The value of tmnxSPIEgrQStatsQueueId specifies the index of the egress QoS queue of this SLA profile instance.
slaProfileName	String	tmnxSLAProfName	The value of tmnxSLAProfName specifies the name of the SLA profile.
SLAProfInstIngQStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSLAProfInstIngQStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			

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5620 SAM counter name	Type	MIB counter name	Description
ingQStatsDropHiPriorityOctets	UINT128	tmnxSPIIngQStatsDropHiPrioOctets	The value of tmnxSPIIngQStatsDropHiPrioOctets indicates the number of high priority octets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQStatsDropHiPriorityPackets	UINT128	tmnxSPIIngQStatsDropHiPrioPkts	The value of tmnxSPIIngQStatsDropHiPrioPkts indicates the number of high priority packets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQStatsDropLoPriorityOctets	UINT128	tmnxSPIIngQStatsDropLoPrioOctets	The value of tmnxSPIIngQStatsDropLoPrioOctets indicates the number of low priority octets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQStatsDropLoPriorityPackets	UINT128	tmnxSPIIngQStatsDropLoPrioPkts	The value of tmnxSPIIngQStatsDropLoPrioPkts indicates the number of low priority packets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQStatsFwdInProfileOctets	UINT128	tmnxSPIIngQStatsFwdInProfOctets	The value of tmnxSPIIngQStatsFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
ingQStatsFwdInProfilePackets	UINT128	tmnxSPIIngQStatsFwdInProfPkts	The value of tmnxSPIIngQStatsFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
ingQStatsFwdOutProfileOctets	UINT128	tmnxSPIIngQStatsFwdOutProfOctets	The value of tmnxSPIIngQStatsFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
ingQStatsFwdOutProfilePackets	UINT128	tmnxSPIIngQStatsFwdOutProfPkts	The value of tmnxSPIIngQStatsFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
ingQStatsOffHiPriorityOctets	UINT128	tmnxSPIIngQStatsOffHiPrioOctets	The value of tmnxSPIIngQStatsOffHiPrioOctets indicates the number of high priority octets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQStatsOffHiPriorityPackets	UINT128	tmnxSPIIngQStatsOffHiPrioPkts	The value of tmnxSPIIngQStatsOffHiPrioPkts indicates the number of high priority packets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQStatsOffLoPriorityOctets	UINT128	tmnxSPIIngQStatsOffLoPrioOctets	The value of tmnxSPIIngQStatsOffLoPrioOctets indicates the number of low priority octets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
ingQStatsOffLoPriorityPackets	UINT128	tmnxSPIIngQStatsOffLoPrioPkts	The value of tmnxSPIIngQStatsOffLoPrioPkts indicates the number of low priority packets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQStatsOffUncoloredOctets	UINT128	tmnxSPIIngQStatsOffUncolOctets	The value of tmnxSPIIngQStatsOffUncolOctets indicates the number of uncolored octets offered to the ingress Qchip.
ingQStatsOffUncoloredPackets	UINT128	tmnxSPIIngQStatsOffUncolPkts	The value of tmnxSPIIngQStatsOffUncolPkts indicates the number of uncolored packets offered to the ingress Qchip.
ingQStatsQueueId	long	tmnxSPIIngQStatsQueueId	The value of tmnxSPIIngQStatsQueueId specifies the index of the ingress QoS queue of this SLA profile instance.
slaProfileName	String	tmnxSLAProfName	The value of tmnxSLAProfName specifies the name of the SLA profile.
SLAProfInstStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSLAProfInstStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
egrQchipDropInProfileOctets	UINT128	tmnxSPIStatsEgrQchipDropInProfOctets	The value of tmnxSPIStatsEgrQchipDropInProfOctets indicates the number of in-profile octets dropped by the egress Qchip.
egrQchipDropInProfilePackets	UINT128	tmnxSPIStatsEgrQchipDropInProfPkts	The value of tmnxSPIStatsEgrQchipDropInProfPkts indicates the number of in-profile packets dropped by the egress Qchip.
egrQchipDropOutProfileOctets	UINT128	tmnxSPIStatsEgrQchipDropOutProfOctets	The value of tmnxSPIStatsEgrQchipDropOutProfOctets indicates the number of out-of-profile octets dropped by the egress Qchip.
egrQchipDropOutProfilePackets	UINT128	tmnxSPIStatsEgrQchipDropOutProfPkts	The value of tmnxSPIStatsEgrQchipDropOutProfPkts indicates the number of out-of-profile packets dropped by the egress Qchip.
egrQchipFwdInProfileOctets	UINT128	tmnxSPIStatsEgrQchipFwdInProfOctets	The value of tmnxSPIStatsEgrQchipFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
egrQchipFwdInProfilePackets	UINT128	tmnxSPIStatsEgrQchipFwdInProfPkts	The value of tmnxSPIStatsEgrQchipFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
egrQchipFwdOutProfileOctets	UINT128	tmnxSPIStatsEgrQchipFwdOutProfOctets	The value of tmnxSPIStatsEgrQchipFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
egrQchipFwdOutProfilePackets	UINT128	tmnxSPIStatsEgrQchipFwdOutProfPkts	The value of tmnxSPIStatsEgrQchipFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
ingPchipOffHiPriorityOctets	UINT128	tmnxSPIStatsIngPchipOffHiPrioOctets	The value of tmnxSPIStatsIngPchipOffHiPrioOctets indicates the number of high priority octets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffHiPriorityPackets	UINT128	tmnxSPIStatsIngPchipOffHiPrioPkts	The value of tmnxSPIStatsIngPchipOffHiPrioPkts indicates the number of high priority packets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffLoPriorityOctets	UINT128	tmnxSPIStatsIngPchipOffLoPrioOctets	The value of tmnxSPIStatsIngPchipOffLoPrioOctets indicates the number of low priority octets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffLoPriorityPackets	UINT128	tmnxSPIStatsIngPchipOffLoPrioPkts	The value of tmnxSPIStatsIngPchipOffLoPrioPkts indicates the number of low priority packets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffUncoloredOctets	UINT128	tmnxSPIStatsIngPchipOffUncolOctets	The value of tmnxSPIStatsIngPchipOffUncolOctets indicates the number of uncolored octets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffUncoloredPackets	UINT128	tmnxSPIStatsIngPchipOffUncolPkts	The value of tmnxSPIStatsIngPchipOffUncolPkts indicates the number of uncolored packets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQchipDropHiPriorityOctets	UINT128	tmnxSPIStatsIngQchipDropHiPrioOctets	The value of tmnxSPIStatsIngQchipDropHiPrioOctets indicates the number of high priority octets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQchipDropHiPriorityPackets	UINT128	tmnxSPIStatsIngQchipDropHiPrioPkts	The value of tmnxSPIStatsIngQchipDropHiPrioPkts indicates the number of high priority packets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQchipDropLoPriorityOctets	UINT128	tmnxSPIStatsIngQchipDropLoPrioOctets	The value of tmnxSPIStatsIngQchipDropLoPrioOctets indicates the number of low priority octets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
ingQchipDropLoPriorityPackets	UINT128	tmnxSPIStatsIngQchipDropLoPrioPkts	The value of tmnxSPIStatsIngQchipDropLoPrioPkts indicates the number of low priority packets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQchipFwdInProfileOctets	UINT128	tmnxSPIStatsIngQchipFwdInProfOctets	The value of tmnxSPIStatsIngQchipFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
ingQchipFwdInProfilePackets	UINT128	tmnxSPIStatsIngQchipFwdInProfPkts	The value of tmnxSPIStatsIngQchipFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
ingQchipFwdOutProfileOctets	UINT128	tmnxSPIStatsIngQchipFwdOutProfOctets	The value of tmnxSPIStatsIngQchipFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
ingQchipFwdOutProfilePackets	UINT128	tmnxSPIStatsIngQchipFwdOutProfPkts	The value of tmnxSPIStatsIngQchipFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
slaProfileName	String	tmnxSLAProfName	The value of tmnxSLAProfName specifies the name of the SLA profile.
SubEgrQosSchedStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubEgrQosSchedStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
egrQosSchedName	String	tmnxSubEgrQosSchedStatsName	The value of tmnxSubEgrQosSchedStatsName specifies the egress QoS scheduler of this subscriber.
forwardedOctets	UINT128	tmnxSubEgrQosSchedStatsFwdOctets	The value of tmnxSubEgrQosSchedStatsFwdOctets indicates the number of forwarded octets by the egress Qchip, as determined by the subscriber egress scheduler policy.
forwardedPackets	UINT128	tmnxSubEgrQosSchedStatsFwdPkts	The value of tmnxSubEgrQosSchedStatsFwdPkts indicates the number of forwarded packets by the egress Qchip, as determined by the subscriber egress scheduler policy.
SubIngQosSchedStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubIngQosSchedStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
forwardedOctets	UINT128	tmnxSubIngQosSchedStatsFwdOctets	The value of tmnxSubIngQosSchedStatsFwdOctets indicates the number of forwarded octets, as determined by the subscriber ingress scheduler policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
forwardedPackets	UINT128	tmnxSubIngQosSchedStatsFwdPkts	The value of tmnxSubIngQosSchedStatsFwdPkts indicates the number of forwarded packets, as determined by the subscriber ingress scheduler policy, offered by the Pchip to the Qchip.
ingQosSchedName	String	tmnxSubIngQosSchedStatsName	The value of tmnxSubIngQosSchedStatsName specifies the ingress QoS scheduler of this subscriber.

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Table H-30 rip statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceReceiveStats MIB table name: TIMETRA-RIP-MIB.vRtrRipIfStatTable Monitored class: rip.Interface			
badPackets	long	vRtrRipIfStatAllRcvBadPackets	vRtrRipIfStatAllRcvBadPackets is the number of RIP updates received on this interface that were discarded as invalid.
v1BadRoutes	long	vRtrRipIfStatV1BadRoutes	vRtrRipIfStatV1BadRoutes is the number of routes, in valid RIPv1 packets, which were ignored for any reason (e.g. unknown address family, or invalid metric).
v1Requests	long	vRtrRipIfStatV1RcvRequests	vRtrRipIfStatV1RcvRequests is the number of RIPv1 request packets received by the RIP process.
v1RequestsIgnored	long	vRtrRipIfStatV1BadRequests	vRtrRipIfStatV1BadRequests is the number of RIPv1 request packets received by the RIP process that were subsequently discarded for any reason.
v1Updates	long	vRtrRipIfStatV1RcvUpdates	vRtrRipIfStatV1RcvUpdates is the number of RIPv1 response packets received by the RIP process.
v1UpdatesIgnored	long	vRtrRipIfStatV1BadUpdates	vRtrRipIfStatV1BadUpdates is the number of RIPv1 response packets received by the RIP process which were subsequently discarded for any reason.
v2AuthenticationErrors	long	vRtrRipIfStatAuthErrors	vRtrRipIfStatAuthErrors is the number of RIPv2 packets received by the RIP process which were subsequently discarded because of an error authenticating the packet.
v2BadRoutes	long	vRtrRipIfStatV2BadRoutes	vRtrRipIfStatV2BadRoutes is the number of routes, in valid RIPv2 packets, which were ignored for any reason (e.g. unknown address family, or invalid metric).

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5620 SAM counter name	Type	MIB counter name	Description
v2Requests	long	vRtrRipIfStatV2RcvRequests	vRtrRipIfStatV2RcvRequests is the number of RIPv2 request packets received by the RIP process.
v2RequestsIgnored	long	vRtrRipIfStatV2BadRequests	vRtrRipIfStatV2BadRequests is the number of RIPv2 request packets received by the RIP process that were subsequently discarded for any reason.
v2Updates	long	vRtrRipIfStatV2RcvUpdates	vRtrRipIfStatV2RcvUpdates is the number of RIPv2 response packets received by the RIP process.
v2UpdatesIgnored	long	vRtrRipIfStatV2BadUpdates	vRtrRipIfStatV2BadUpdates is the number of RIPv2 response packets received by the RIP process which were subsequently discarded for any reason.
InterfaceTransmitStats MIB table name: TIMETRA-RIP-MIB.vRtrRipIfStatTable Monitored class: rip.Interface			
totalUpdates	long	vRtrRipIfStatAllSentUpdates	vRtrRipIfStatAllSentUpdates is the number of all RIP updates actually sent on this interface. This explicitly does include full updates sent containing new information.
triggeredUpdates	long	vRtrRipIfStatAllTriggeredUpdates	vRtrRipIfStatAllTriggeredUpdates is the number of triggered RIP updates actually sent on this interface. This explicitly does include full updates sent containing new information.

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Table H-31 rsvp statistics

5620 SAM counter name	Type	MIB counter name	Description
AuthenticationKeyStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.AuthenticationKey			
errorPacketsReceived	UINT128	vRtrRsvpIfStatRxAuthErrors	The total number of RSVP packets with MD5 errors received on this RSVP interface.
errorPacketsTransmitted	UINT128	vRtrRsvpIfStatTxAuthErrors	The total number of RSVP packets with MD5 errors sent by this RSVP interface.
RsvpInterfaceReceiveStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.Interface			
acks	UINT128	vRtrRsvpIfStatRxAcks	The total number of RSVP ACK messages received when refresh reduction is enabled on this RSVP interface.
acks	UINT128	vRtrRsvpIfStatTxAcks	The total number of RSVP ACK messages that have been transmitted on this RSVP interface when refresh reduction is enabled.

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5620 SAM counter name	Type	MIB counter name	Description
bundles	UINT128	vRtrRsvpIfStatRxBundles	The total number of RSVP bundled packets received on this RSVP interface. Bundled packets are sent when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatTxBundles	The total number of RSVP bundled packets that have been transmitted on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatRxErrorPkts	The total number of RSVP packets with errors received on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatTxErrorPkts	The total number of RSVP packets with errors that have been transmitted on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatRxHelloReqs	The total number of RSVP HELLO REQ messages received on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatTxHelloReqs	The total number of RSVP HELLO REQ packets that have been transmitted on this RSVP interface.
helloTimeout	long	vRtrRsvpIfStatHelloTimeout	The total number of hello messages that timed out on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatRxPkts	The total number of error free RSVP packets received on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatTxPkts	The total number of error free RSVP packets that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatRxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatTxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted from this RSVP interface.
paths	UINT128	vRtrRsvpIfStatRxPaths	The total number of RSVP PATH messages that have been received on this RSVP interface.
paths	UINT128	vRtrRsvpIfStatTxPaths	The total number of RSVP PATH messages that have been transmitted from this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatRxPathTears	The total number of RSVP PATH TEAR messages that have been received on this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatTxPathTears	The total number of RSVP PATH TEAR messages that have been transmitted from this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatRxSRefreshes	The total number of RSVP summary refresh, SREFRESH, messages received on this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatTxSRefreshes	The total number of summary refresh, SREFRESH, messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
reserveConfirms	UINT128	vRtrRsvpIfStatRxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been received on this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
reserveConfirms	UINT128	vRtrRsvpIfStatTxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been transmitted from this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatRxResvErrors	The total number of RSVP RESV ERROR messages that have been received on this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatTxResvErrors	The total number of RSVP RESV ERROR messages that have been transmitted from this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatRxResvs	The total number of RSVP RESV messages that have been received on this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatTxResvs	The total number of RSVP RESV messages that have been transmitted from this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatRxResvTears	The total number of RSVP RESV TEAR messages that have been received on this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatTxResvTears	The total number of RSVP RESV TEAR messages that have been transmitted from this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatRxTotalPkts	The total number of RSVP packets, including errors, received on this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatTxTotalPkts	The total number of RSVP packets, including error packets, that have been transmitted on this RSVP interface.
RsvpInterfaceStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfTable Monitored class: rsvp.Interface			
activeReservations	long	vRtrRsvpIfActiveReservationCount	The total number of active RSVP sessions that have reserved bandwidth.
activeSessions	long	vRtrRsvpIfActiveSessionCount	The total number of active RSVP sessions on this interface. This count includes sessions that have requested bandwidth as well as sessions that have not requested any bandwidth.
bandwidth	long	vRtrRsvpIfBandwidth	The value of vRtrRsvpIfBandwidth specifies the amount of bandwidth in mega-bits per second (Mbps) available to be reserved for the RSVP protocol on this interface. This is typically the (port Speed * subscription Percentage).
reservedBandwidth	long	vRtrRsvpIfReservedBandwidth	The value of vRtrRsvpIfReservedBandwidth specifies the amount of bandwidth in mega-bits per second (Mbps) to reserved by the RSVP sessions on this interface. A value of zero (0) indicates that no bandwidth is reserved.

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5620 SAM counter name	Type	MIB counter name	Description
totalSessions	long	vRtrRsvpIfTotalSessionCount	The total number of RSVP sessions on this interface. This count includes sessions that are active as well as sessions that have been signalled but a response has not yet been received.
RsvpInterfaceTransmitStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.Interface			
acks	UINT128	vRtrRsvpIfStatRxAcks	The total number of RSVP ACK messages received when refresh reduction is enabled on this RSVP interface.
acks	UINT128	vRtrRsvpIfStatTxAcks	The total number of RSVP ACK messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatRxBundles	The total number of RSVP bundled packets received on this RSVP interface. Bundled packets are sent when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatTxBundles	The total number of RSVP bundled packets that have been transmitted on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatRxErrorPkts	The total number of RSVP packets with errors received on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatTxErrorPkts	The total number of RSVP packets with errors that have been transmitted on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatRxHelloReqs	The total number of RSVP HELLO REQ messages received on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatTxHelloReqs	The total number of RSVP HELLO REQ packets that have been transmitted on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatRxPkts	The total number of error free RSVP packets received on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatTxPkts	The total number of error free RSVP packets that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatRxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatTxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted from this RSVP interface.
paths	UINT128	vRtrRsvpIfStatRxPaths	The total number of RSVP PATH messages that have been received on this RSVP interface.
paths	UINT128	vRtrRsvpIfStatTxPaths	The total number of RSVP PATH messages that have been transmitted from this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatRxPathTears	The total number of RSVP PATH TEAR messages that have been received on this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
pathTears	UINT128	vRtrRsvpIfStatTxPathTears	The total number of RSVP PATH TEAR messages that have been transmitted from this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatRxSRefreshes	The total number of RSVP summary refresh, SREFRESH, messages received on this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatTxSRefreshes	The total number of summary refresh, SREFRESH, messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
reserveConfirms	UINT128	vRtrRsvpIfStatRxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been received on this RSVP interface.
reserveConfirms	UINT128	vRtrRsvpIfStatTxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been transmitted from this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatRxResvErrors	The total number of RSVP RESV ERROR messages that have been received on this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatTxResvErrors	The total number of RSVP RESV ERROR messages that have been transmitted from this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatRxResvs	The total number of RSVP RESV messages that have been received on this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatTxResvs	The total number of RSVP RESV messages that have been transmitted from this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatRxResvTears	The total number of RSVP RESV TEAR messages that have been received on this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatTxResvTears	The total number of RSVP RESV TEAR messages that have been transmitted from this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatRxTotalPkts	The total number of RSVP packets, including errors, received on this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatTxTotalPkts	The total number of RSVP packets, including error packets, that have been transmitted on this RSVP interface.
RsvpSessionStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpSessionStatTable Monitored class: rsvp.Session			
detourAge	long	vRtrRsvpSessionDetourAge	vRtrRsvpSessionDetourAge is the age (i.e., time from creation till now) of this detour LSP in 10-millisecond periods.
detourTimeUp	long	vRtrRsvpSessionDetourTimeUp	vRtrRsvpSessionDetourTimeUp is the total time in 10-millisecond units that the detour LSP has been operational.
pathsReceived	UINT128	vRtrRsvpSessionRxPaths	The total number of RSVP PATH messages received for this RSVP session.

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5620 SAM counter name	Type	MIB counter name	Description
pathsTransmitted	UINT128	vRtrRsvpSessionTxPaths	The total number of RSVP PATH messages transmitted for this RSVP session.
reservesReceived	UINT128	vRtrRsvpSessionRxResvs	The total number of RSVP RESV messages received for this RSVP session.
reservesTransmitted	UINT128	vRtrRsvpSessionTxResvs	The total number of RSVP RESV messages transmitted for this RSVP session.

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Table H-32 rtr statistics

5620 SAM counter name	Type	MIB counter name	Description
CpeCheckStats MIB table name: TIMETRA-VRTR-MIB.vRtrInetStatRteCpeChkStatsTable Monitored class: rtr.StaticRoute			
downTransitions	long	vRtrInetStatRteCpeChkDownTrans	The value of vRtrInetStatRteCpeChkDownTrans indicates the number of times the CPE has transitioned to the unavailable state.
echoReplyPacketsReceived	long	vRtrInetStatRteCpeChkInPktCnt	The value of vRtrInetStatRteCpeChkInPktCnt indicates the number of echo-reply packets received.
echoRequestPacketsSent	long	vRtrInetStatRteCpeChkOutPktCnt	The value of vRtrInetStatRteCpeChkOutPktCnt indicates the number of echo-request packets sent.
hostUpDownTime	long	vRtrInetStatRteCpeChkUpTime	The value of vRtrInetStatRteCpeChkUpTime indicates how long (in hundredths of a second) that the CPE has been available.
ttl	long	vRtrInetStatRteCpeChkTTL	The value of vRtrInetStatRteCpeChkTTL indicates the time, in seconds, before the CPE will be declared down. Upon receipt of an echo reply, it has the value of vRtrInetStaticRouteCpeInterval * vRtrInetStaticRouteCpeDropCnt and is decremented by 1 every second.
upTransitions	long	vRtrInetStatRteCpeChkUpTrans	The value of vRtrInetStatRteCpeChkUpTrans indicates the number of times the CPE has transitioned to the available state.
DhcpRelayStats MIB table name: TIMETRA-VRTR-MIB.vRtrIfDHCPRelayStatsTable Monitored classes: • rtr.DhcpRelayConfiguration • rtr.SubItfDhcpRelayCfg • rtr.GrpItfDhcpRelayCfg			
authPktsDiscarded	long	vRtrIfDHCPRelayAuthPktsDiscarded	vRtrIfDHCPRelayAuthPktsDiscarded indicates the total number of packets discarded because authentication was not successful.

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5620 SAM counter name	Type	MIB counter name	Description
authPktsSuccess	long	vRtrIfDHCPRelayAuthPktsSuccess	vRtrIfDHCPRelayAuthPktsSuccess indicates the total number of packets for which authentication was successful.
clientPacketsDiscarded	long	vRtrIfDHCPRelayClientPktsDiscarded	vRtrIfDHCPRelayClientPktsDiscarded indicates the total number of client packets dicarded by the DHCP relay agent.
clientPacketsRelayed	long	vRtrIfDHCPRelayClientPktsRelayed	vRtrIfDHCPRelayClientPktsRelayed indicates the total number of client packets relayed by the DHCP relay agent.
clientPktsProxLS	long	vRtrIfDHCPRelayClientPktsProxLS	vRtrIfDHCPRelayClientPktsProxLS indicates the total number of client packets proxied by the DHCP relay agent based on a lease state. The lease itself can have been obtained from a DHCP or RADIUS server. This is the so called lease split functionality.
clientPktsProxRad	long	vRtrIfDHCPRelayClientPktsProxRad	vRtrIfDHCPRelayClientPktsProxRad indicates the total number of client packets proxied by the DHCP relay agent based on data received from a RADIUS server.
clientPktsProxRad	long	vRtrIfDHCPRelayClientPktsSnooped	vRtrIfDHCPRelayClientPktsSnooped indicates the total number of client packets snooped by the DHCP relay agent.
pktsGenRelease	long	vRtrIfDHCPRelayPktsGenRelease	vRtrIfDHCPRelayPktsGenRelease indicates the total number of DHCP RELEASE messages spoofed by the DHCP relay agent to the DHCP server.
receivedMalformedPackets	long	vRtrIfDHCPRelayRxMalformedPkts	vRtrIfDHCPRelayRxMalformedPkts indicates the total number of malformed packets received by the DHCP relay agent.
receivedPackets	long	vRtrIfDHCPRelayRxPkts	vRtrIfDHCPRelayRxPkts indicates the total number of packets received by the DHCP relay agent.
receivedUntrustedPackets	long	vRtrIfDHCPRelayRxUntrustedPkts	vRtrIfDHCPRelayRxUntrustedPkts indicates the total number of untrusted packets received by the DHCP relay agent.
serverPacketsDiscarded	long	vRtrIfDHCPRelayServerPktsDiscarded	vRtrIfDHCPRelayServerPktsDiscarded indicates the total number of server packets discarded by the DHCP relay agent.
serverPacketsRelayed	long	vRtrIfDHCPRelayServerPktsRelayed	vRtrIfDHCPRelayServerPktsRelayed indicates the total number of server packets relayed by the DHCP relay agent.
serverPktsSnooped	long	vRtrIfDHCPRelayPktsGenForceRenew	vRtrIfDHCPRelayPktsGenForceRenew indicates the total number of DHCP FORCERENEW messages spoofed by the DHCP relay agent to the DHCP clients.
serverPktsSnooped	long	vRtrIfDHCPRelayServerPktsSnooped	vRtrIfDHCPRelayServerPktsSnooped indicates the total number of server packets snooped by the DHCP relay agent.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedPackets	long	vRtrIfDHCPRelayTxPkts	vRtrIfDHCPRelayTxPkts indicates the total number of packets transmitted by the DHCP relay agent.
DhcpRelayV6Stats MIB table name: TIMETRA-SERV-MIB.svcIfDHCP6MsgStatTable Monitored class: rtr.DhcpRelayV6Configuration			
droppedPackets	long	svcIfDHCP6MsgStatsDropped	The value of svcIfDHCP6MsgStatsDropped indicates the number of DHCP6 packets were dropped on this service interface.
receivedPackets	long	svcIfDHCP6MsgStatsRcvd	The value of svcIfDHCP6MsgStatsRcvd indicates the number of DHCP6 packets were received on this service interface.
transmittedPackets	long	svcIfDHCP6MsgStatsSent	The value of svcIfDHCP6MsgStatsSent indicates the number of DHCP6 packets were sent on this service interface.
NetworkInterfaceURPFStats MIB table name: TIMETRA-VRTR-MIB.vRtrIfStatsTable Monitored class: rtr.NetworkInterface			
uRPFCheckFailPkts	UINT128	vRtrIfuRPFCheckFailPkts	The value of vRtrIfuRPFCheckFailPkts indicates the number of packets that fail uRPF check on this interface.
uRPFCheckFailPktsHigh32	long	vRtrIfuRPFCheckFailPktsHigh32	The value of vRtrIfuRPFCheckFailPktsHigh32 indicates the high 32 bits of the value of vRtrIfuRPFCheckFailPkts.
uRPFCheckFailPktsLow32	long	vRtrIfuRPFCheckFailPktsLow32	The value of vRtrIfuRPFCheckFailPktsLow32 indicates the lower 32 bits of the value of vRtrIfuRPFCheckFailPkts.
RouteStats MIB table name: TIMETRA-VRTR-MIB.vRtrStatTable Monitored classes: • rtr.VirtualRouter • vprn.Site			
activeARPEntries	long	vRtrStatActiveARPEntries	vRtrStatActiveARPEntries indicates the number of active ARP entries for the specified virtual router in the system.
aggregateActiveRoutes	long	vRtrAggregateActiveRoutes	vRtrAggregateActiveRoutes indicates the current number of active aggregate routes for this instance of the route table.
aggregateRoutes	long	vRtrAggregateRoutes	vRtrAggregateRoutes indicates the current number of aggregate routes for this instance of the route table.
bgpActiveRoutes	long	vRtrBGPActiveRoutes	vRtrBGPActiveRoutes indicates the current number of active bgp routes for this instance of the route table.
bgpRoutes	long	vRtrBGPRoutes	vRtrBGPRoutes indicates the current number of bgp routes for this instance of the route table.

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5620 SAM counter name	Type	MIB counter name	Description
bgpVpnActiveRoutes	long	vRtrStatBGPVpnActiveRoutes	vRtrStatBGPVpnActiveRoutes indicates the current number of active VPN-IPV4 routes learned by MP-BGP for this virtual router.
bgpVpnRoutes	long	vRtrStatBGPVpnRoutes	vRtrStatBGPVpnRoutes indicates the current number of VPN-IPV4 routes learned by MP-BGP for this virtual router.
directActiveRoutes	long	vRtrDirectActiveRoutes	vRtrDirectActiveRoutes indicates the current number of active direct routes for this instance of the route table.
directRoutes	long	vRtrDirectRoutes	vRtrDirectRoutes indicates the current number of direct routes for this instance of the route table.
illegalLabelsReceived	long	vRtrStatIllegalLabels	vRtrStatIllegalLabels indicates the number of illegally received labels on this virtual router.
isisActiveRoutes	long	vRtrISISActiveRoutes	vRtrISISActiveRoutes indicates the current number of active isis routes for this instance of the route table.
isisRoutes	long	vRtrISISRoutes	vRtrISISRoutes indicates the current number of isis routes for this instance of the route table.
ldpActiveTunnels	long	vRtrStatActiveLdpTunnels	vRtrStatActiveLdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'ldp'.
ldpTunnels	long	vRtrStatTotalLdpTunnels	vRtrStatTotalLdpTunnels indicates the current number of both active and inactive LDP tunnels.
multicastRoutes	long	vRtrMulticastRoutes	vRtrMulticastRoutes indicates the current number of rows in the vRtrPimGrpSrcTable.
ospfActiveRoutes	long	vRtrOSPFActiveRoutes	vRtrOSPFActiveRoutes indicates the current number of active ospf routes for this instance of the route table.
ospfRoutes	long	vRtrOSPFRoutes	vRtrOSPFRoutes indicates the current number of ospf routes for this instance of the route table.
ripActiveRoutes	long	vRtrRIPActiveRoutes	vRtrRIPActiveRoutes indicates the current number of active rip routes for this instance of the route table.
ripRoutes	long	vRtrRIPRoutes	vRtrRIPRoutes indicates the current number of rip routes for this instance of the route table.
routerInterfacesActive	long	vRtrStatActiveIfs	vRtrStatActiveIfs indicates the current number of router interfaces with vRtrIfAdminState equal 'inService' on this virtual router.
routerInterfacesConfigured	long	vRtrStatConfiguredIfs	vRtrStatConfiguredIfs indicates the current number of router interfaces configured on this virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
routesInVrf	long	vRtrStatCurrNumRoutes	vRtrStatCurrNumRoutes indicates the current number of routes in the VRF for this virtual router.
sdpActiveTunnels	long	vRtrStatActiveSdpTunnels	vRtrStatActiveSdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'sdp'.
sdpTunnels	long	vRtrStatTotalSdpTunnels	vRtrStatTotalSdpTunnels indicates the current number of both active and inactive SDP tunnels.
staticActiveRoutes	long	vRtrStaticActiveRoutes	vRtrStaticActiveRoutes indicates the current number of active static routes for this instance of the route table.
staticRoutes	long	vRtrStaticRoutes	vRtrStaticRoutes indicates the current number of static routes for this instance of the route table.
totalARPEntries	long	vRtrStatTotalARPEntries	vRtrStatTotalARPEntries indicates the total number of active and inactive ARP entries for the specified virtual router in the system.
VirtualInterfaceIcmp6InStats MIB table name: TIMETRA-VRTR-MIB.vRtrIfIcmp6Table Monitored class: rtr.VirtualInterfaceIcmp6Configuration			
inDestinationUnreachable	long	vRtrIfIcmp6InDestUnreachs	The value of vRtrIfIcmp6InDestUnreachs indicates the number of ICMP Destination Unreachable messages received by this interface.
inEchoReplies	long	vRtrIfIcmp6InEchoReplies	The value of vRtrIfIcmp6InEchoReplies indicates the number of ICMP Echo Reply messages received by this interface.
inEchoRequests	long	vRtrIfIcmp6InEchos	The value of vRtrIfIcmp6InEchos indicates the number of ICMP Echo (request) messages received by this interface.
inErrors	long	vRtrIfIcmp6InErrors	The value of vRtrIfIcmp6InErrors indicates the number of ICMP messages which this interface received but determined as having ICMP-specific errors (bad ICMP checksums, bad length , etc.).
inNeighborAdvertisements	long	vRtrIfIcmp6InNbrAdvertisements	The value of vRtrIfIcmp6InNbrAdvertisements indicates the number of ICMP Neighbor Advertisement messages received by this interface.
inNeighborSolicits	long	vRtrIfIcmp6InNbrSolicits	The value of vRtrIfIcmp6InNbrSolicits indicates the number of ICMP Neighbor Solicit messages received by this interface.
inPacketTooBig	long	vRtrIfIcmp6InPktTooBigs	The value of vRtrIfIcmp6InPktTooBigs indicates the number of ICMP Packet Too Big messages received by this interface.
inRedirects	long	vRtrIfIcmp6InRedirects	The value of vRtrIfIcmp6InRedirects indicates number of ICMP Redirect messages received by this interface.

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5620 SAM counter name	Type	MIB counter name	Description
inRouterAdvertisements	long	vRtrIfIcmp6InRtrAdvertisements	The value of vRtrIfIcmp6InRtrAdvertisements indicates the number of ICMP Router Advertisement messages received by this interface.
inRouterSolicits	long	vRtrIfIcmp6InRtrSolicits	The value of vRtrIfIcmp6InRtrSolicits indicates the number of ICMP Router Solicit messages received by this interface.
inTimeExceeded	long	vRtrIfIcmp6InTimeExcds	The value of vRtrIfIcmp6InTimeExcds indicates the number of ICMP Time Exceeded messages received by this interface.
inTotalMessages	long	vRtrIfIcmp6InMsgs	The value of vRtrIfIcmp6InMsgs indicates the total number of ICMP messages received by this interface which includes all those counted by vRtrIfIcmp6InErrors. Note that this interface is the interface to which the ICMP messages were addressed which may not be necessarily the input interface for the messages.
VirtualRouterIcmp6InStats MIB table name: TIMETRA-VRTR-MIB.vRtrIcmp6Table Monitored classes: • rtr.VirtualRouter • vprn.Site			
inDestinationUnreachable	long	vRtrIcmp6InDestUnreachs	The value of vRtrIcmp6InDestUnreachs indicates the number of ICMP Destination Unreachable messages received by this router instance.
inEchoReplies	long	vRtrIcmp6InEchoReplies	The value of vRtrIcmp6InEchoReplies indicates the number of ICMP Echo Reply messages received by this router instance.
inEchoRequests	long	vRtrIcmp6InEchos	The value of vRtrIcmp6InEchos indicates the number of ICMP Echo (request) messages received by this router instance.
inErrors	long	vRtrIcmp6InErrors	The value of vRtrIcmp6InErrors indicates the number of ICMP messages which this router instance received but determined as having ICMP-specific errors (bad ICMP checksums, bad length , etc.).
inNeighborAdvertisements	long	vRtrIcmp6InNbrAdvertisements	The value of vRtrIcmp6InNbrAdvertisements indicates the number of ICMP Neighbor Advertisement messages received by this router instance.
inNeighborSolicits	long	vRtrIcmp6InNbrSolicits	The value of vRtrIcmp6InNbrSolicits indicates the number of ICMP Neighbor Solicit messages received by this router instance.
inPacketTooBig	long	vRtrIcmp6InPktTooBigs	The value of vRtrIcmp6InPktTooBigs indicates the number of ICMP Packet Too Big messages received by this router instance.

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5620 SAM counter name	Type	MIB counter name	Description
inRedirects	long	vRtrIcmp6InRedirects	The value of vRtrIcmp6InRedirects indicates number of ICMP Redirect messages received by this router instance.
inRouterAdvertisements	long	vRtrIcmp6InRtrAdvertisements	The value of vRtrIcmp6InRtrAdvertisements indicates the number of ICMP Router Advertisement messages received by this router instance.
inRouterSolicits	long	vRtrIcmp6InRtrSolicits	The value of vRtrIcmp6InRtrSolicits indicates the number of ICMP Router Solicit messages received by this router instance.
inTimeExceeded	long	vRtrIcmp6InTimeExcds	The value of vRtrIcmp6InTimeExcds indicates the number of ICMP Time Exceeded messages received by this router instance.
inTotalMessages	long	vRtrIcmp6InMsgs	The value of vRtrIcmp6InMsgs indicates the total number of ICMP messages received by this router instance which includes all those counted by vRtrIcmp6InErrors.

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Table H-33 service statistics

5620 SAM counter name	Type	MIB counter name	Description
CemSapStats MIB table name: TIMETRA-SAP-MIB.sapCemStatsTable Monitored class: service.L2AccessInterface			
cemStatsEgressDroppedPkts	long	sapCemStatsEgressDroppedPkts	The value of sapCemStatsEgressDroppedPkts indicates the total number of packets that were dropped due to errors.
cemStatsEgressESs	long	sapCemStatsEgressESs	The value of sapCemStatsEgressESs indicates the number of Error Seconds (ESs) encountered. Any malformed packet, seq. error, LOPS and similar are considered as error seconds.
cemStatsEgressFailureCounts	long	sapCemStatsEgressFailureCounts	The value of sapCemStatsEgressFailureCounts indicates the number failure events. A failure event begins when the LOPS failure is declared, and ends when the failure is cleared.
cemStatsEgressForwardedPkts	long	sapCemStatsEgressForwardedPkts	The value of sapCemStatsEgressForwardedPkts indicates the number of packets that were successfully forwarded.
cemStatsEgressJtrBfrDepth	long	sapCemStatsEgressJtrBfrDepth	The value of sapCemStatsEgressJtrBfrDepth indicates the current packet depth of the jitter buffer.

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5620 SAM counter name	Type	MIB counter name	Description
cemStatsEgressJtrBfrOverruns	long	sapCemStatsEgressJtrBfrOverruns	The value of sapCemStatsEgressJtrBfrOverruns indicates the number of times a packet was dropped because it could not fit in the jitter buffer.
cemStatsEgressJtrBfrUnderruns	long	sapCemStatsEgressJtrBfrUnderruns	The value of sapCemStatsEgressJtrBfrUnderruns indicates the number of times a packet needed to be played out and the jitter buffer was empty.
cemStatsEgressLBitDropped	long	sapCemStatsEgressLBitDropped	The value of sapCemStatsEgressLBitDropped indicates the number of packets dropped due to the L bit set by the far end.
cemStatsEgressMalformedPkts	long	sapCemStatsEgressMalformedPkts	The value of sapCemStatsEgressMalformedPkts indicates the number of packets detected with unexpected size, or bad headers' stack.
cemStatsEgressMisOrderDropped	long	sapCemStatsEgressMisOrderDropped	The value of sapCemStatsEgressMisOrderDropped indicates the number of packets detected out of order (via control word sequence numbers), and could not be re-ordered, or could not be placed in the jitter buffer because it was out of the current window.
cemStatsEgressMissingPkts	long	sapCemStatsEgressMissingPkts	The value of sapCemStatsEgressMissingPkts indicates the number of missing packets (as detected via control word sequence number gaps).
cemStatsEgressMultipleDropped	long	sapCemStatsEgressMultipleDropped	The value of sapCemStatsEgressMultipleDropped indicates the number of packets dropped due to multiple sequence numbers.
cemStatsEgressOverrunCounts	long	sapCemStatsEgressOverrunCounts	The value of sapCemStatsEgressOverrunCounts indicates the number of times the jitter buffer went into an overrun state.
cemStatsEgressPktsReOrder	long	sapCemStatsEgressPktsReOrder	The value of sapCemStatsEgressPktsReOrder indicates the number of packets detected out of sequence (via control word sequence number), but successfully re-ordered.
cemStatsEgressSESs	long	sapCemStatsEgressSESs	The value of sapCemStatsEgressSESs indicates the number of Severely Error Seconds (SESs) encountered. This is when more than 30 percent of the packets within a one second window are missing.
cemStatsEgressUASs	long	sapCemStatsEgressUASs	The value of sapCemStatsEgressUASs indicates the number of Unavailable Seconds (UASs) encountered. Any consecutive ten seconds of SESs are counted as one UAS.

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5620 SAM counter name	Type	MIB counter name	Description
cemStatsEgressUnderrunCounts	long	sapCemStatsEgressUnderrunCounts	The value of sapCemStatsEgressUnderrunCounts indicates the number of times the jitter buffer went into an underrun state.
cemStatsIngressDroppedPkts	long	sapCemStatsIngressDroppedPkts	The value of sapCemStatsIngressDroppedPkts indicates the total number of packets that were dropped due to errors.
cemStatsIngressForwardedPkts	long	sapCemStatsIngressForwardedPkts	The value of sapCemStatsIngressForwardedPkts indicates the number of packets that were successfully forwarded.
L3AccessInterfaceURPFStats MIB table name: TIMETRA-VRTR-MIB.vRtrIfStatsTable Monitored class: service.L3AccessInterface			
uRPFCheckFailPkts	UINT128	vRtrIfuRPFCheckFailPkts	The value of vRtrIfuRPFCheckFailPkts indicates the number of packets that fail uRPF check on this interface.
uRPFCheckFailPktsHigh32	long	vRtrIfuRPFCheckFailPktsHigh32	The value of vRtrIfuRPFCheckFailPktsHigh32 indicates the high 32 bits of the value of vRtrIfuRPFCheckFailPkts.
uRPFCheckFailPktsLow32	long	vRtrIfuRPFCheckFailPktsLow32	The value of vRtrIfuRPFCheckFailPktsLow32 indicates the lower 32 bits of the value of vRtrIfuRPFCheckFailPkts.
PppoeSapStats MIB table name: TIMETRA-PPPOE-MIB.tmnxPppoeSapStatsTable Monitored classes: • ies.ServiceAccessPoint • vprn.ServiceAccessPoint • vpls.L2AccessInterface			
pppoeSapReceivedDropped	long	tmnxPppoeSapRxDropped	The value of tmnxPppoeSapRxDropped indicates the number of dropped PPPoE packets.
pppoeSapReceivedInvalidAcCookie	long	tmnxPppoeSapRxInvalidAcCookie	The value of tmnxPppoeSapRxInvalidAcCookie indicates the number of PPPoE Active Discovery packets received with an invalid AC-Cookie tag.
pppoeSapReceivedInvalidCode	long	tmnxPppoeSapRxInvalidCode	The value of tmnxPppoeSapRxInvalidCode indicates the number of PPPoE packets received with an invalid code field.
pppoeSapReceivedInvalidLen	long	tmnxPppoeSapRxInvalidLen	The value of tmnxPppoeSapRxInvalidLen indicates the number of PPPoE packets received with an invalid length field.
pppoeSapReceivedInvalidSession	long	tmnxPppoeSapRxInvalidSession	The value of tmnxPppoeSapRxInvalidSession indicates the number of PPPoE packets received with an invalid session-id field.

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5620 SAM counter name	Type	MIB counter name	Description
pppoeSapReceivedInvalidTags	long	tmnxPppoeSapRxInvalidTags	The value of tmnxPppoeSapRxInvalidTags indicates the number of PPPoE Active Discovery packets received with invalid tags.
pppoeSapReceivedInvalidType	long	tmnxPppoeSapRxInvalidType	The value of tmnxPppoeSapRxInvalidType indicates the number of PPPoE packets received with an invalid type field.
pppoeSapReceivedInvalidVersion	long	tmnxPppoeSapRxInvalidVersion	The value of tmnxPppoeSapRxInvalidVersion indicates the number of PPPoE packets received with an invalid version field.
pppoeSapReceivedPADI	long	tmnxPppoeSapRxPadi	The value of tmnxPppoeSapRxPadi indicates the number of PADI (PPPoE Active Discovery Initiation) packets received on this SAP.
pppoeSapReceivedPADR	long	tmnxPppoeSapRxPadr	The value of tmnxPppoeSapRxPadr indicates the number of PADR (PPPoE Active Discovery Request) packets received on this SAP.
pppoeSapReceivedPADT	long	tmnxPppoeSapRxPadt	The value of tmnxPppoeSapRxPadt indicates the number of PADT (PPPoE Active Discovery Terminate) packets received on this SAP.
pppoeSapReceivedSession	long	tmnxPppoeSapRxSession	The value of tmnxPppoeSapRxSession indicates the number packets received during the PPP session stage on this SAP.
pppoeSapTransmittedPADO	long	tmnxPppoeSapTxPado	The value of tmnxPppoeSapTxPado indicates the number of PADO (PPPoE Active Discovery Offer) packets transmitted on this SAP.
pppoeSapTransmittedPADS	long	tmnxPppoeSapTxPads	The value of tmnxPppoeSapTxPads indicates the number of PADS (PPPoE Active Discovery Session) packets transmitted on this SAP.
pppoeSapTransmittedPADT	long	tmnxPppoeSapTxPadt	The value of tmnxPppoeSapTxPadt indicates the number of PADT (PPPoE Active Discovery Terminate) packets transmitted on this SAP.
pppoeSapTransmittedSession	long	tmnxPppoeSapTxSession	The value of tmnxPppoeSapTxSession indicates the number packets transmitted during the PPP session stage on this SAP.
SapBaseStats MIB table name: TIMETRA-SAP-MIB.sapBaseStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
authenticationPacketsDiscarded	long	sapBaseStatsAuthenticationPktsDiscarded	The number of DHCP packets discarded as result of authentication.
authenticationPacketsSuccessful	long	sapBaseStatsAuthenticationPktsSuccess	The number of DHCP packets successfully authenticated.
customerId	long	sapBaseStatsCustId	The Customer ID for the associated service.

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5620 SAM counter name	Type	MIB counter name	Description
egressQChipDroppedInProfOctets	UINT128	sapBaseStatsEgressQchip DroppedInProfOctets	The number of in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipDroppedInProfPackets	UINT128	sapBaseStatsEgressQchip DroppedInProfPackets	The number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipDroppedOutProfOctets	UINT128	sapBaseStatsEgressQchip DroppedOutProfOctets	The number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipDroppedOutProfPackets	UINT128	sapBaseStatsEgressQchip DroppedOutProfPackets	The number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipForwardedInProfOctets	UINT128	sapBaseStatsEgressQchip ForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
egressQChipForwardedInProfPackets	UINT128	sapBaseStatsEgressQchip ForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
egressQChipForwardedOutProfOctets	UINT128	sapBaseStatsEgressQchip ForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
egressQChipForwardedOutProfPackets	UINT128	sapBaseStatsEgressQchip ForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
ingressPChipDroppedOctets	UINT128	sapBaseStatsIngressPchip DroppedOctets	The number of octets dropped by the ingress Pchip due to: SAP state, ingress MAC, IP or IPv6 filter, same segment discard, bad checksum, etc.
ingressPChipDroppedPackets	UINT128	sapBaseStatsIngressPchip DroppedPackets	The number of packets dropped by the ingress Pchip due to: SAP state, ingress MAC, IP or IPv6 filter, same segment discard, bad checksum, etc.
ingressPChipOfferedHiPrioOctets	UINT128	sapBaseStatsIngressPchip OfferedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedHiPrioPackets	UINT128	sapBaseStatsIngressPchip OfferedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedLoPrioOctets	UINT128	sapBaseStatsIngressPchip OfferedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedLoPrioPackets	UINT128	sapBaseStatsIngressPchip OfferedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedUncoloredOctets	UINT128	sapBaseStatsIngressPchip OfferedUncoloredOctets	The number of uncolored octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
ingressPChipOfferedUncoloredPackets	UINT128	sapBaseStatsIngressPchipOfferedUncoloredPackets	The number of uncolored packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressQChipDroppedHiPrioOctets	UINT128	sapBaseStatsIngressQchipDroppedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipDroppedHiPrioPackets	UINT128	sapBaseStatsIngressQchipDroppedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipDroppedLoPrioOctets	UINT128	sapBaseStatsIngressQchipDroppedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipDroppedLoPrioPackets	UINT128	sapBaseStatsIngressQchipDroppedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipForwardedInProfOctets	UINT128	sapBaseStatsIngressQchipForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
ingressQChipForwardedInProfPackets	UINT128	sapBaseStatsIngressQchipForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
ingressQChipForwardedOutProfOctets	UINT128	sapBaseStatsIngressQchipForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
ingressQChipForwardedOutProfPackets	UINT128	sapBaseStatsIngressQchipForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
SapEgrQosPlcyQueueStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosPlcyQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedInProfOctets	UINT128	sapEgQosPlcyQueueStatsDroppedInProfOctets	The value of sapEgQosPlcyQueueStatsDroppedInProfOctets indicates the number in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedInProfPackets	UINT128	sapEgQosPlcyQueueStatsDroppedInProfPackets	The value of sapEgQosPlcyQueueStatsDroppedInProfPackets indicates the number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.

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5620 SAM counter name	Type	MIB counter name	Description
droppedOutProfOctets	UINT128	sapEgQosPlcyQueueStats DroppedOutProfOctets	The value of sapEgQosPlcyQueueStatsDroppedOutProfOctets indicates the number out-of-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfPackets	UINT128	sapEgQosPlcyQueueStats DroppedOutProfPackets	The value of sapEgQosPlcyQueueStatsDroppedOutProfPackets indicates the number out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapEgQosPlcyQueueStats ForwardedInProfOctets	The value of sapEgQosPlcyQueueStatsForwardedInProfOctets indicates the number ofin-profile octets (rate below CIR) forwarded by the egress Qchip.
forwardedInProfPackets	UINT128	sapEgQosPlcyQueueStats ForwardedInProfPackets	The value of sapEgQosPlcyQueueStatsForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
forwardedOutProfOctets	UINT128	sapEgQosPlcyQueueStats ForwardedOutProfOctets	The value of sapEgQosPlcyQueueStatsForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
forwardedOutProfPackets	UINT128	sapEgQosPlcyQueueStats ForwardedOutProfPackets	The value of sapEgQosPlcyQueueStatsForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
policyId	long	sapEgQosPlcyQueuePlcyId	The row index in the tSapEgressTable corresponding to this egress QoS policy.
queueId	long	sapEgQosPlcyQueueId	The value of sapEgQosPlcyQueueId indicates index of the egress QoS queue of this SAP.
SapEgrQosPlcyStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedInProfOctets	UINT128	sapEgQosPlcyDroppedInProfOctets	The value of the object sapEgQosPlcyDroppedInProfOctets indicates the number of in-profile octets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedInProfPackets	UINT128	sapEgQosPlcyDroppedInProfPackets	The value of the object sapEgQosPlcyDroppedInProfPackets indicates the number of in-profile packets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.

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5620 SAM counter name	Type	MIB counter name	Description
droppedOutProfOctets	UINT128	sapEgQosPlcyDroppedOutProfOctets	The value of the object sapEgQosPlcyDroppedOutProfOctets indicates the number of out-profile octets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfPackets	UINT128	sapEgQosPlcyDroppedOutProfPackets	The value of the object sapEgQosPlcyDroppedOutProfPackets indicates the number of out-profile packets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapEgQosPlcyForwardedInProfOctets	The value of the object sapEgQosPlcyForwardedInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
forwardedInProfPackets	UINT128	sapEgQosPlcyForwardedInProfPackets	The value of the object sapEgQosPlcyForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
forwardedOutProfOctets	UINT128	sapEgQosPlcyForwardedOutProfOctets	The value of the object sapEgQosPlcyForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
forwardedOutProfPackets	UINT128	sapEgQosPlcyForwardedOutProfPackets	The value of the object sapEgQosPlcyForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
policyId	long	sapEgQosPlcyId	The value of the object sapEgQosPlcyId indicates the row index in the tSapEgressTable corresponding to this egress QoS policy, or one if no policy is specified.
SapEgrQosQueueStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
customerId	long	sapEgrQosCustId	The Customer ID for the associated service.
droppedInProfOctets	UINT128	sapEgrQosQueueStatsDroppedInProfOctets	The number of in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedInProfPackets	UINT128	sapEgrQosQueueStatsDroppedInProfPackets	The number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.

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5620 SAM counter name	Type	MIB counter name	Description
droppedOutProfOctets	UINT128	sapEgrQosQueueStatsDroppedOutProfOctets	The number of out-of-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfPackets	UINT128	sapEgrQosQueueStatsDroppedOutProfPackets	The number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapEgrQosQueueStatsForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
forwardedInProfPackets	UINT128	sapEgrQosQueueStatsForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
forwardedOutProfOctets	UINT128	sapEgrQosQueueStatsForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
forwardedOutProfPackets	UINT128	sapEgrQosQueueStatsForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
queueId	long	sapEgrQosQueueId	The index of the egress QoS queue of this SAP.
SapEgrQosSchedStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosSchedStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
customerId	long	sapEgrQosSchedCustId	The Customer ID for the associated service.
forwardedOctets	UINT128	sapEgrQosSchedStatsForwardedOctets	The number of forwarded octets by the egress Qchip, as determined by the SAP egress scheduler policy.
forwardedPackets	UINT128	sapEgrQosSchedStatsForwardedPackets	The number of forwarded packets by the egress Qchip, as determined by the SAP egress scheduler policy.
qosSchedName	String	sapEgrQosSchedName	The index of the egress QoS scheduler of this SAP.
SapEgrSchedPlcyPortStats MIB table name: TIMETRA-SAP-MIB.sapEgrSchedPlcyPortStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapEgrSchedPlcyPortStatsFwdOct	The value of sapEgrSchedPlcyPortStatsFwdOct indicates the number of forwarded octets,as determined by the SAP egress scheduler policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
forwardedPackets	UINT128	sapEgrSchedPlcyPortStatsFwdPkt	The value of sapEgrSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the SAP egress scheduler policy, offered by the Pchip to the Qchip.
SapEgrSchedPlcyStats MIB table name: TIMETRA-SAP-MIB.sapEgrSchedPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapEgrSchedPlcyStatsFwdOct	The number of octets forwarded by the egress Qchip, as determined by the SAP egress scheduler policy.
forwardedPackets	UINT128	sapEgrSchedPlcyStatsFwdPkt	The number of packets forwarded by the egress Qchip, as determined by the SAP egress scheduler policy.
SapIngQosPlcyQueueStats MIB table name: TIMETRA-SAP-MIB.sapIngQosPlcyQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedHiPrioOctets	UINT128	sapIgQosPlcyQueueStatsDroppedHiPrioOctets	The value of sapIgQosPlcyQueueStatsDroppedHiPrioOctets indicates the number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedHiPrioPackets	UINT128	sapIgQosPlcyQueueStatsDroppedHiPrioPackets	The value of sapIgQosPlcyQueueStatsDroppedHiPrioPackets indicates the number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioOctets	UINT128	sapIgQosPlcyQueueStatsDroppedLoPrioOctets	The value of sapIgQosPlcyQueueStatsDroppedLoPrioOctets indicates the number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioPackets	UINT128	sapIgQosPlcyQueueStatsDroppedLoPrioPackets	The value of sapIgQosPlcyQueueStatsDroppedLoPrioPackets indicates the number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapIgQosPlcyQueueStatsForwardedInProfOctets	The value of sapIgQosPlcyQueueStatsForwardedInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
forwardedInProfPackets	UINT128	sapIgQosPlcyQueueStatsForwardedInProfPackets	The value of sapIgQosPlcyQueueStatsForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
forwardedOutProfOctets	UINT128	sapIgQosPlcyQueueStatsForwardedOutProfOctets	The value of sapIgQosPlcyQueueStatsForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
forwardedOutProfPackets	UINT128	sapIgQosPlcyQueueStatsForwardedOutProfPackets	The value of sapIgQosPlcyQueueStatsForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
offeredHiPrioOctets	UINT128	sapIgQosPlcyQueueStatsOfferedHiPrioOctets	The value of sapIgQosPlcyQueueStatsOfferedHiPrioOctets indicates the number of high priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredHiPrioPackets	UINT128	sapIgQosPlcyQueueStatsOfferedHiPrioPackets	The value of sapIgQosPlcyQueueStatsOfferedHiPrioPackets indicates the number of high priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredLoPrioOctets	UINT128	sapIgQosPlcyQueueStatsOfferedLoPrioOctets	The value of sapIgQosPlcyQueueStatsOfferedLoPrioOctets indicates the number of low priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredLoPrioPackets	UINT128	sapIgQosPlcyQueueStatsOfferedLoPrioPackets	The value of sapIgQosPlcyQueueStatsOfferedLoPrioPackets indicates the number of low priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
policyId	long	sapIgQosPlcyQueuePlcyId	The value of the object sapIgQosPlcyQueuePlcyId indicates the row index in the tSapIngressTable corresponding to this ingress QoS policy.
queueId	long	sapIgQosPlcyQueueId	The index of the ingress QoS queue of this SAP used by the policy indicated by sapIgQosPlcyQueuePlcyId.
uncoloredOctetsOffered	UINT128	sapIgQosPlcyQueueStatsUncoloredOctetsOffered	The value of sapIgQosPlcyQueueStatsUncoloredOctetsOffered indicates the number of uncolored octets offered to the ingress Qchip.
uncoloredPacketsOffered	UINT128	sapIgQosPlcyQueueStatsUncoloredPacketsOffered	The value of sapIgQosPlcyQueueStatsUncoloredPacketsOffered indicates the number of uncolored packets offered to the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
SapIngQosPlcyStats MIB table name: TIMETRA-SAP-MIB.sapIngrQosPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedHiPrioOctets	UINT128	sapIgQosPlcyDroppedHiPrioOctets	The value of the object sapIgQosPlcyDroppedHiPrioOctets indicates the number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedHiPrioPackets	UINT128	sapIgQosPlcyDroppedHiPrioPackets	The value of the object sapIgQosPlcyDroppedHiPrioPackets indicates the number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioOctets	UINT128	sapIgQosPlcyDroppedLoPrioOctets	The value of the object sapIgQosPlcyDroppedLoPrioOctets indicates the number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioPackets	UINT128	sapIgQosPlcyDroppedLoPrioPackets	The value of the object sapIgQosPlcyDroppedLoPrioPackets indicates the number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapIgQosPlcyForwardedInProfOctets	The value of the object sapIgQosPlcyForwardedInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
forwardedInProfPackets	UINT128	sapIgQosPlcyForwardedInProfPackets	The value of the object sapIgQosPlcyForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
forwardedOutProfOctets	UINT128	sapIgQosPlcyForwardedOutProfOctets	The value of the object sapIgQosPlcyForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
forwardedOutProfPackets	UINT128	sapIgQosPlcyForwardedOutProfPackets	The value of the object sapIgQosPlcyForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
policyId	long	sapIgQosPlcyId	The value of the object sapIgQosPlcyId indicates the row index in the tSapIngressTable corresponding to this ingress QoS policy, or one if no policy is specified.
SapIngQosQueueStats MIB table name: TIMETRA-SAP-MIB.sapIngQosQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
customerId	long	sapIngQosCustId	The Customer ID for the associated service.
droppedHiPrioOctets	UINT128	sapIngQosQueueStatsDroppedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedHiPrioPackets	UINT128	sapIngQosQueueStatsDroppedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioOctets	UINT128	sapIngQosQueueStatsDroppedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioPackets	UINT128	sapIngQosQueueStatsDroppedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapIngQosQueueStatsForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
forwardedInProfPackets	UINT128	sapIngQosQueueStatsForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
forwardedOutProfOctets	UINT128	sapIngQosQueueStatsForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
forwardedOutProfPackets	UINT128	sapIngQosQueueStatsForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
offeredHiPrioOctets	UINT128	sapIngQosQueueStatsOfferedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredHiPrioPackets	UINT128	sapIngQosQueueStatsOfferedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredLoPrioOctets	UINT128	sapIngQosQueueStatsOfferedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
offeredLoPrioPackets	UINT128	sapIngQosQueueStatsOfferedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
queueId	long	sapIngQosQueueId	The index of the ingress QoS queue of this SAP.
uncoloredOctetsOffered	UINT128	sapIngQosQueueStatsUncoloredOctetsOffered	The number of uncolored octets offered to the ingress Qchip.
uncoloredPacketsOffered	UINT128	sapIngQosQueueStatsUncoloredPacketsOffered	The number of uncolored packets offered to the ingress Qchip.
SapIngQosSchedStats MIB table name: TIMETRA-SAP-MIB.sapIngQosSchedStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
customerId	long	sapIngQosSchedCustId	The Customer ID for the associated service.
forwardedOctets	UINT128	sapIngQosSchedStatsForwardedOctets	The number of forwarded octets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
forwardedPackets	UINT128	sapIngQosSchedStatsForwardedPackets	The number of forwarded packets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
qosSchedName	String	sapIngQosSchedName	The index of the ingress QoS scheduler of this SAP.
SapIngSchedPlcyPortStats MIB table name: TIMETRA-SAP-MIB.sapIngSchedPlcyPortStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapIngSchedPlcyPortStatsFwdOct	The value of sapIngSchedPlcyPortStatsFwdOct indicates the number of forwarded octets,as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
forwardedPackets	UINT128	sapIngSchedPlcyPortStatsFwdPkt	The value of sapIngSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
SapIngSchedPlcyStats MIB table name: TIMETRA-SAP-MIB.sapIngSchedPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapIngSchedPlcyStatsFwdOct	The number of forwarded octets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
forwardedPackets	UINT128	sapIngSchedPlcyStatsFwdPkt	The number of forwarded packets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.

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Table H-34 sitesec statistics

5620 SAM counter name	Type	MIB counter name	Description
CpmFilterQueueStats MIB table name: TIMETRA-SECURITY-MIB.tCpmFilterQueueStatsTable Monitored class: sitesec.CpmFilterQueue			
droppedInOctets	UINT128	tCpmFilterQInProfileDropOctets	The value of tCpmFilterQInProfileDropOctets indicates the number of octets complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedInPackets	UINT128	tCpmFilterQInProfileDropPkts	The value of tCpmFilterQInProfileDropPkts indicates the number of packets complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedOutOctets	UINT128	tCpmFilterQOutProfileDropOctets	The value of tCpmFilterQOutProfileDropOctets indicates the number of octets not complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedOutPackets	UINT128	tCpmFilterQOutProfileDropPkts	The value of tCpmFilterQOutProfileDropPkts indicates the number of packets not complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
forwardedInOctets	UINT128	tCpmFilterQInProfileFwdOctets	The value of tCpmFilterQInProfileFwdOctets indicates the number of octets complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedInPackets	UINT128	tCpmFilterQInProfileFwdPkts	The value of tCpmFilterQInProfileFwdPkts indicates the number of packets complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedOutOctets	UINT128	tCpmFilterQOutProfileFwdOctets	The value of tCpmFilterQOutProfileFwdOctets indicates the number of octets not complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.

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5620 SAM counter name	Type	MIB counter name	Description
forwardedOutPackets	UINT128	tCpmFilterQOutProfileFwdPkts	The value of tCpmFilterQOutProfileFwdPkts indicates the number of packets not complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
CpmIpFilterStats MIB table name: TIMETRA-SECURITY-MIB.tCpmIpFilterStatsTable Monitored class: sitesec.CpmIpFilterEntry			
droppedPackets	UINT128	tCpmIpFilterStatsDroppedPkts	The value of tCpmIpFilterStatsDroppedPkts indicates the number of packets dropped due to the tCpmIpFilterEntry with the same index.
forwardedPackets	UINT128	tCpmIpFilterStatsForwardedPkts	The value of tCpmIpFilterStatsForwardedPkts indicates the number of packets forwarded due to the tCpmIpFilterEntry with the same index.
CpmIPv6FilterStats MIB table name: TIMETRA-SECURITY-MIB.tCpmIPv6FilterStatsTable Monitored class: sitesec.CpmIPv6FilterEntry			
droppedPackets	UINT128	tCpmIPv6FilterStatsDroppedPkts	The value of tCpmIPv6FilterStatsDroppedPkts indicates the number of packets dropped due to the tCpmIPv6FilterEntry with the same index.
forwardedPackets	UINT128	tCpmIPv6FilterStatsForwardedPkts	The value of tCpmIPv6FilterStatsForwardedPkts indicates the number of packets forwarded due to the tCpmIPv6FilterEntry with the same index.
MafEntryStats MIB table name: TIMETRA-SECURITY-MIB.tmnxIPMafMatchTable Monitored class: sitesec.MafEntry			
matchCount	UINT128	tmnxIPMafMatchCount	The value of tmnxIPMafMatchCount indicates the number of times a management packet has matched this filter entry.

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Table H-35 sonetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
SonetFarEndLineCurrentStats MIB table name: SONET-MIB.sonetFarEndLineCurrentTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
codingViolations	long	sonetFarEndLineCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
erroredSeconds	long	sonetFarEndLineCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
severelyErroredSeconds	long	sonetFarEndLineCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
unavailableSeconds	long	sonetFarEndLineCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
SonetFarEndLineIntervalStats MIB table name: SONET-MIB.sonetFarEndLineIntervalTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetFarEndLineIntervalCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetFarEndLineIntervalESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetFarEndLineIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetFarEndLineIntervalSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetFarEndLineIntervalUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.

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5620 SAM counter name	Type	MIB counter name	Description
SonetFarEndPathCurrentStats MIB table name: SONET-MIB.sonetFarEndPathCurrentTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
erroredSeconds	long	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
severelyErroredSeconds	long	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
unavailableSeconds	long	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
SonetFarEndPathIntervalStats MIB table name: SONET-MIB.sonetFarEndPathIntervalTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetFarEndPathIntervalCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetFarEndPathIntervalESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.

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5620 SAM counter name	Type	MIB counter name	Description
intervalNumber	int	sonetFarEndPathIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetFarEndPathIntervalSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetFarEndPathIntervalUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
SonetFarEndVtCurrentStats MIB table name: SONET-MIB.sonetFarEndVTCurrentTable Monitored class: sonetequipment.TributaryChannel			
codingViolations	long	sonetFarEndVTCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH VT interface in the current 15 minute interval.
erroredSeconds	long	sonetFarEndVTCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
severelyErroredSeconds	long	sonetFarEndVTCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH VT interface in the current 15 minute interval.
unavailableSeconds	long	sonetFarEndVTCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH VT interface in the current 15 minute interval.
SonetFarEndVtIntervalStats MIB table name: SONET-MIB.sonetFarEndVTIntervalTable Monitored class: sonetequipment.TributaryChannel			
codingViolations	long	sonetFarEndVTIntervalCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetFarEndVTIntervalESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.

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5620 SAM counter name	Type	MIB counter name	Description
intervalNumber	int	sonetFarEndVTIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetFarEndVTIntervalSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetFarEndVTIntervalUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.
SonetLineCurrentStats MIB table name: SONET-MIB.sonetLineCurrentTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetLineCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in the current 15 minute interval.
currentStatus	long	sonetLineCurrentStatus	This variable indicates the status of the interface. The sonetLineCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetLineNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetLineNoDefect 2 sonetLineAIS 4 sonetLineRDI.
erroredSeconds	long	sonetLineCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
severelyErroredSeconds	long	sonetLineCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
unavailableSeconds	long	sonetLineCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
SonetLineIntervalStats MIB table name: SONET-MIB.sonetLineIntervalTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetLineIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.

5620 SAM counter name	Type	MIB counter name	Description
erroredSeconds	long	sonetLineIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetLineIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetLineIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetLineIntervalUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
SonetPathCurrentStats MIB table name: SONET-MIB.sonetPathCurrentTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.
currentStatus	long	sonetPathCurrentStatus	This variable indicates the status of the interface. The sonetPathCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetPathNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetPathNoDefect 2 sonetPathSTSLOP 4 sonetPathSTSAIS 8 sonetPathSTSRDI 16 sonetPathUnequipped 32 sonetPathSignalLabelMismatch.
currentWidth	int	sonetPathCurrentWidth	A value that indicates the type of the SONET/SDH Path. For SONET, the assigned types are the STS-Nc SPEs, where N = 1, 3, 12, 24, 48, 192 and 768. STS-1 is equal to 51.84 Mbps. For SDH, the assigned types are the STM-Nc VCs, where N = 1, 4, 16, 64 and 256.
erroredSeconds	long	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.

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5620 SAM counter name	Type	MIB counter name	Description
severelyErroredSeconds	long	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
unavailableSeconds	long	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.
SonetPathIntervalStats MIB table name: SONET-MIB.sonetPathIntervalTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetPathIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetPathIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetPathIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetPathIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetPathIntervalUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in a particular 15-minute interval in the past 24 hours.
SonetSectionCurrentStats MIB table name: SONET-MIB.sonetSectionCurrentTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetSectionCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in the current 15 minute interval.

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5620 SAM counter name	Type	MIB counter name	Description
currentStatus	long	sonetSectionCurrentStatus	This variable indicates the status of the interface. The sonetSectionCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetSectionNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetSectionNoDefect 2 sonetSectionLOS 4 sonetSectionLOF.
erroredSeconds	long	sonetSectionCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
severelyErroredFramingSeconds	long	sonetSectionCurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
severelyErroredSeconds	long	sonetSectionCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
SonetSectionIntervalStats MIB table name: SONET-MIB.sonetSectionIntervalTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetSectionIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetSectionIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetSectionIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredFramingSeconds	long	sonetSectionIntervalSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
severelyErroredSeconds	long	sonetSectionIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
SonetVtCurrentStats MIB table name: SONET-MIB.sonetVTCurrentTable Monitored class: sonetequipment.TributaryChannel			

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5620 SAM counter name	Type	MIB counter name	Description
codingViolations	long	sonetVTCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH VT in the current 15 minute interval.
currentStatus	long	sonetVTCurrentStatus	This variable indicates the status of the interface. The sonetVTCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects and failures simultaneously. The sonetVTNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetVTNoDefect 2 sonetVTLOP 4 sonetVTPathAIS 8 sonetVTPathRDI 16 sonetVTPathRFI 32 sonetVTUnequipped 64 sonetVTSignalLabelMismatch.
currentWidth	int	sonetVTCurrentWidth	A value that indicates the type of the SONET VT and SDH VC. Assigned widths are VT1.5/VC11, VT2/VC12, VT3, VT6/VC2, and VT6c.
erroredSeconds	long	sonetVTCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH VT in the current 15 minute interval.
severelyErroredSeconds	long	sonetVTCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH VT in the current 15 minute interval.
unavailableSeconds	long	sonetVTCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a VT in the current 15 minute interval.
SonetVtIntervalStats MIB table name: SONET-MIB.sonetVTIntervalTable Monitored class: sonetequipment.TributaryChannel			
codingViolations	long	sonetVTIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH VT in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetVTIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH VT in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetVTIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetVTIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH VT in a particular 15-minute interval in the past 24 hours.

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5620 SAM counter name	Type	MIB counter name	Description
unavailableSeconds	long	sonetVTIntervalUASs	The counter associated with the number of Unavailable Seconds encountered by a VT in a particular 15-minute interval in the past 24 hours.

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Table H-36 srrp statistics

5620 SAM counter name	Type	MIB counter name	Description
InstanceStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxSrrpStatsTable Monitored class: srrp.Instance			
advertiseIntervalDiscards	long	tmnxSrrpStatsAdvIntDiscards	The value for tmnxSrrpStatsAdvIntDiscards indicates the total number of SRRP advertisement packets discarded because the advertisement interval in the received packet was different than the one configured for the local virtual router.
advertiseIntervalErrors	long	tmnxSrrpStatsAdvIntErrors	The value for tmnxSrrpStatsAdvIntErrors indicates the total number of SRRP advertisement packets received for which the advertisement interval is different than the one configured for the local virtual router.
advertiseRcvd	long	tmnxSrrpStatsAdvRcvd	The value for tmnxSrrpStatsAdvRcvd indicates the total number of SRRP advertisements received by this virtual router.
advertiseSent	long	tmnxSrrpStatsAdvSent	The value for tmnxSrrpStatsAdvSent indicates the total number of SRRP advertisements sent by this virtual router.
becomeBackupRouting	long	tmnxSrrpStatsBecomeBackupRouting	The value for tmnxSrrpStatsBecomeBackupRouting indicates the total number of times that the virtual router's state has transitioned to backup routing state.
becomeBackupShunt	long	tmnxSrrpStatsBecomeBackupShunt	The value for tmnxSrrpStatsBecomeBackupShunt indicates the total number of times that the virtual router's state has transitioned to backup shunt.
becomeMaster	long	tmnxSrrpStatsBecomeMaster	The value for tmnxSrrpStatsBecomeMaster indicates the total number of times that the virtual router's state has transitioned to master.
becomeNonMaster	long	tmnxSrrpStatsBecomeNonMaster	The value for tmnxSrrpStatsBecomeNonMaster indicates the total number times that the virtual router's state has transitioned from master to a non-master state.

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5620 SAM counter name	Type	MIB counter name	Description
masterChanges	long	tmnxSrrpStatsMasterChanges	The value for tmnxSrrpStatsMasterChanges indicates the total number of times the virtual router has seen the master virtual router change.
preemptedEvents	long	tmnxSrrpStatsPreemptedEvents	The value for tmnxSrrpStatsPreemptedEvents indicates the total number of times the virtual router has been preempted by another non-owner master with higher priority.
preemptEvents	long	tmnxSrrpStatsPreemptEvents	The value for tmnxSrrpStatsPreemptEvents indicates the total number of times the virtual router has preempted another non-owner master with lower priority.
priorityZeroPktsRcvd	long	tmnxSrrpStatsPriZeroPktsSent	The value for tmnxSrrpStatsPriZeroPktsSent indicates the total number of SRRP packets sent by the virtual router with a priority of '0'.
priorityZeroPktsSent	long	tmnxSrrpStatsPriZeroPktsRcvd	The value for tmnxSrrpStatsPriZeroPktsRcvd indicates the total number of SRRP packets received by the virtual router with a priority of '0'.

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Table H-37 subscrauth statistics

5620 SAM counter name	Type	MIB counter name	Description
PolicyStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAuthPlcyStatsTable Monitored class: subscrauth.Policy			
rejectedAuthentications	long	tmnxSubAuthPlcyReject	The value of tmnxSubAuthPlcyReject indicates how many subscriber messages (e.g. DHCP, PPPoE, ...) were rejected by the authentication. Note that not all requests are therefore forwarded to radius. If several requests are sent in a short timeframe, only the first one is sent to radius.
successfulAuthentications	long	tmnxSubAuthPlcySuccess	The value of tmnxSubAuthPlcySuccess indicates how many subscriber messages (e.g. DHCP, PPPoE, ...) were authenticated successfully. Note that not all requests are therefore forwarded to radius. If several requests are sent in a short timeframe, only the first one is sent to radius.
RadiusEntryStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAuthPlcyRadStatsTable Monitored class: subscrauth.RadiusEntry			

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5620 SAM counter name	Type	MIB counter name	Description
failedAuthenticationRequests	long	tmnxSubAuthPlcyRadSendFail	The value of tmnxSubAuthPlcyRadSendFail indicates how many authentication requests failed because the packet could not be sent out.
md5VerificationFailedRequests	long	tmnxSubAuthPlcyRadMd5Fail	The value of tmnxSubAuthPlcyRadMd5Fail indicates how many times the MD5 verification failed on a msg from this radius server.
pendingAuthenticationRequest	long	tmnxSubAuthPlcyRadPending	The value of tmnxSubAuthPlcyRadPending indicates how many authentication requests are currently pending.
rejectedAuthenticationRequests	long	tmnxSubAuthPlcyRadReject	The value of tmnxSubAuthPlcyRadReject indicates how many authentication requests were rejected by this radius server.
successfulAuthenticationRequests	long	tmnxSubAuthPlcyRadSuccess	The value of tmnxSubAuthPlcyRadSuccess indicates how many authentication requests were accepted by this radius server.
timedOutAuthenticationRequests	long	tmnxSubAuthPlcyRadTimeout	The value of tmnxSubAuthPlcyRadTimeout indicates how many times this radius did not reply to an authentication request within the timeout.

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Table H-38 svq statistics

5620 SAM counter name	Type	MIB counter name	Description
CustMultiSvcSiteEgrSchedPlcyPortStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteEgrSchedPlcyPortStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custEgrSchedPlcyPortStatsFwdOct	The value of custEgrSchedPlcyPortStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site egress scheduler policy.
forwardedPackets	UINT128	custEgrSchedPlcyPortStatsFwdPkt	The value of custEgrSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site egress scheduler policy.
portID	long	custEgrSchedPlcyPortStatsPort	The value of custEgrSchedPlcyPortStatsPort is used as an index of the egress QoS scheduler of this customer multi service site. When an MSS assignment is an aps/ccag/lag in 'link' mode, each member-port of the aps/ccag/lag has its own scheduler. This object refers to the TmnxPortID of these member-ports.

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5620 SAM counter name	Type	MIB counter name	Description
CustMultiSvcSiteEgrSchedPlcyStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteEgrSchedPlcyStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custEgrSchedPlcyStatsFwdOct	The value of the object custEgrSchedPlcyStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site egress scheduler policy.
forwardedPackets	UINT128	custEgrSchedPlcyStatsFwdPkt	The value of the object custEgrSchedPlcyStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site egress scheduler policy.
CustMultiSvcSiteIngSchedPlcyPortStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteIngSchedPlcyPortStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custIngSchedPlcyPortStatsFwdOct	The value of custIngSchedPlcyPortStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site ingress scheduler policy.
forwardedPackets	UINT128	custIngSchedPlcyPortStatsFwdPkt	The value of custIngSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site ingress scheduler policy.
portID	long	custIngSchedPlcyPortStatsPort	The value of custIngSchedPlcyPortStatsPort is used as an index of the ingress QoS scheduler of this customer multi service site. When an MSS assignment is an aps/ccag/lag in 'link' mode, each member-port of the aps/ccag/lag has its own scheduler. This object refers to the TmnxPortID of these member-ports.
CustMultiSvcSiteIngSchedPlcyStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteIngSchedPlcyStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custIngSchedPlcyStatsFwdOct	The value of the object custIngSchedPlcyStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site ingress scheduler policy.
forwardedPackets	UINT128	custIngSchedPlcyStatsFwdPkt	The value of the object custIngSchedPlcyStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site ingress scheduler policy.

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5620 SAM counter name	Type	MIB counter name	Description
MirrorSdpBindingStats MIB table name: TIMETRA-SDP-MIB.sdpBindBaseStatsTable Monitored class: svt.MirrorSdpBinding			
egressForwardedOctets	UINT128	sdpBindBaseStatsEgressForwardedOctets	.
egressForwardedPackets	UINT128	sdpBindBaseStatsEgressForwardedPackets	.
ingressDroppedOctets	UINT128	sdpBindBaseStatsIngDropOctets	.
ingressDroppedPackets	UINT128	sdpBindBaseStatsIngressDroppedPackets	.
ingressForwardedOctets	UINT128	sdpBindBaseStatsIngFwdOctets	.
ingressForwardedPackets	UINT128	sdpBindBaseStatsIngressForwardedPackets	.
SdpBindingBaseStats MIB table name: TIMETRA-SDP-MIB.sdpBindBaseStatsTable Monitored classes: • svt.SpokeSdpBinding • svt.MeshSdpBinding			
egressForwardedOctets	UINT128	sdpBindBaseStatsEgressForwardedOctets	.
egressForwardedPackets	UINT128	sdpBindBaseStatsEgressForwardedPackets	.
ingressDroppedOctets	UINT128	sdpBindBaseStatsIngDropOctets	.
ingressDroppedPackets	UINT128	sdpBindBaseStatsIngressDroppedPackets	.
ingressForwardedOctets	UINT128	sdpBindBaseStatsIngFwdOctets	.
ingressForwardedPackets	UINT128	sdpBindBaseStatsIngressForwardedPackets	.
SdpBindingIgmpSnpgErrorStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sdpBindIgmpSnpgStatsTable Monitored classes: • svt.SpokeSdpBinding • svt.MeshSdpBinding			
sdpBndIgmpSnpgImportPolicyDrops	long	sdpBndIgmpSnpgImportPolicyDrops	The value of the object sdpBndIgmpSnpgImportPolicyDrops indicates the number of times an IGMP Group or Source is dropped because of applying an import policy on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndIgmpSnpgMaxNumGroupsDrops	long	sdpBndIgmpSnpgMaxNumGroupsDrops	The value of the object sdpBndIgmpSnpgMaxNumGroupsDrops indicates the number of times an IGMP Group is dropped because of exceeding the configured maximum number of groups on this SDP Bind.
sdpBndIgmpSnpgMaxNumSourcesDrops	long	sdpBndIgmpSnpgMaxNumSourcesDrops	The value of the object sdpBndIgmpSnpgMaxNumSourcesDrops indicates the number of times an IGMP Source is dropped because of exceeding the configured maximum number of sources per group on this SDP Bind.
sdpBndIgmpSnpgMcacPolicyDrops	long	sdpBndIgmpSnpgMcacPolicyDrops	The value of the object sdpBndIgmpSnpgMcacPolicyDrops indicates the number of times an IGMP Group is dropped because of applying a multicast CAC policy on this SDP Bind.
sdpBndIgmpSnpgRxBadEncodedPkts	long	sdpBndIgmpSnpgRxBadEncodedPkts	The value of the object sdpBndIgmpSnpgRxBadEncodedPkts indicates the number of IGMP packets dropped on this SDP Bind because of a bad encoding.
sdpBndIgmpSnpgRxBadIgmpChksmPkts	long	sdpBndIgmpSnpgRxBadIgmpChksmPkts	The value of the object sdpBndIgmpSnpgRxBadIgmpChksmPkts indicates the number of dropped IGMP packets on this SDP Bind because of a bad IGMP header checksum.
sdpBndIgmpSnpgRxBadIpChksmPkts	long	sdpBndIgmpSnpgRxBadIpChksmPkts	The value of the object sdpBndIgmpSnpgRxBadIpChksmPkts indicates the number of dropped IGMP packets on this SDP Bind because of a bad IPv4 header checksum.
sdpBndIgmpSnpgRxBadLenPkts	long	sdpBndIgmpSnpgRxBadLenPkts	The value of the object sdpBndIgmpSnpgRxBadLenPkts indicates the number of IGMP packets dropped on this SDP Bind because of a bad length.
sdpBndIgmpSnpgRxNoRtrAlertPkts	long	sdpBndIgmpSnpgRxNoRtrAlertPkts	The value of the object sdpBndIgmpSnpgRxNoRtrAlertPkts indicates the number of IGMP packets dropped on this SDP Bind because the Router Alert Option in the IP packet is not set.
sdpBndIgmpSnpgRxWrongVersionPkts	long	sdpBndIgmpSnpgRxWrongVersionPkts	The value of the object sdpBndIgmpSnpgRxWrongVersionPkts indicates the total number of IGMP packets with a wrong version received on this SDP Bind.
sdpBndIgmpSnpgRxZeroSrcAdrPkts	long	sdpBndIgmpSnpgRxZeroSrcAdrPkts	The value of the object sdpBndIgmpSnpgRxZeroSrcAdrPkts indicates the number of IGMP packets dropped on this SDP Bind because they contain a zero source IPv4 address.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndIgmpSnpgSendQueryCfgDrops	long	sdpBndIgmpSnpgSendQueryCfgDrops	The value of the object sdpBndIgmpSnpgSendQueryCfgDrops indicates the number of times an IGMP Query is dropped because the object sdpBndIgmpSnpgCfgSendQueries for this SDP Bind is set to 'enabled(1)'.
SdpBindingIgmpSnpgStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sdpBindIgmpSnpgStatsTable Monitored classes: • svt.SpokeSdpBinding • svt.MeshSdpBinding			
sdpBndIgmpSnpgFwdGenQueries	long	sdpBndIgmpSnpgFwdGenQueries	The value of the object sdpBndIgmpSnpgFwdGenQueries indicates the number of IGMP General Queries forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdGrpSpecQueries	long	sdpBndIgmpSnpgFwdGrpSpecQueries	The value of the object sdpBndIgmpSnpgFwdGrpSpecQueries indicates the number of IGMP Group-Specific Queries forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdSrcSpecQueries	long	sdpBndIgmpSnpgFwdSrcSpecQueries	The value of the object sdpBndIgmpSnpgFwdSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdUnknownType	long	sdpBndIgmpSnpgFwdUnknownType	The value of the object sdpBndIgmpSnpgFwdUnknownType indicates the number of IGMP unknown type packets forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdV1Reports	long	sdpBndIgmpSnpgFwdV1Reports	The value of the object sdpBndIgmpSnpgFwdV1Reports indicates the number of IGMPv1 Reports forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdV2Leaves	long	sdpBndIgmpSnpgFwdV2Leaves	The value of the object sdpBndIgmpSnpgFwdV2Leaves indicates the number of IGMPv2 Leaves forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdV2Reports	long	sdpBndIgmpSnpgFwdV2Reports	The value of the object sdpBndIgmpSnpgFwdV2Reports indicates the number of IGMPv2 Reports forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdV3Reports	long	sdpBndIgmpSnpgFwdV3Reports	The value of the object sdpBndIgmpSnpgFwdV3Reports indicates the number of IGMPv3 Reports forwarded on this SDP Bind.
sdpBndIgmpSnpgRxGenQueries	long	sdpBndIgmpSnpgRxGenQueries	The value of the object sdpBndIgmpSnpgRxGenQueries indicates the number of IGMP General Queries received on this SDP Bind.
sdpBndIgmpSnpgRxGrpSpecQueries	long	sdpBndIgmpSnpgRxGrpSpecQueries	The value of the object sdpBndIgmpSnpgRxGrpSpecQueries indicates the number of IGMP Group-Specific Queries received on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndIgmpSnpgRxSrcSpecQueries	long	sdpBndIgmpSnpgRxSrcSpecQueries	The value of the object sdpBndIgmpSnpgRxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries received on this SDP Bind.
sdpBndIgmpSnpgRxUnknownType	long	sdpBndIgmpSnpgRxUnknownType	The value of the object sdpBndIgmpSnpgRxUnknownType indicates the number of IGMP unknown type packets received on this SDP Bind.
sdpBndIgmpSnpgRxV1Reports	long	sdpBndIgmpSnpgRxV1Reports	The value of the object sdpBndIgmpSnpgRxV1Reports indicates the number of IGMPv1 Reports received on this SDP Bind.
sdpBndIgmpSnpgRxV2Leaves	long	sdpBndIgmpSnpgRxV2Leaves	The value of the object sdpBndIgmpSnpgRxV2Leaves indicates the number of IGMPv2 Leaves received on this SDP Bind.
sdpBndIgmpSnpgRxV2Reports	long	sdpBndIgmpSnpgRxV2Reports	The value of the object sdpBndIgmpSnpgRxV2Reports indicates the number of IGMPv2 Reports received on this SDP Bind.
sdpBndIgmpSnpgRxV3Reports	long	sdpBndIgmpSnpgRxV3Reports	The value of the object sdpBndIgmpSnpgRxV3Reports indicates the number of IGMPv3 Reports received on this SDP Bind.
sdpBndIgmpSnpgTxGenQueries	long	sdpBndIgmpSnpgTxGenQueries	The value of the object sdpBndIgmpSnpgTxGenQueries indicates the number of IGMP General Queries transmitted on this SDP Bind.
sdpBndIgmpSnpgTxGrpSpecQueries	long	sdpBndIgmpSnpgTxGrpSpecQueries	The value of the object sdpBndIgmpSnpgTxGrpSpecQueries indicates the number of IGMP Group-Specific Queries transmitted on this SDP Bind.
sdpBndIgmpSnpgTxSrcSpecQueries	long	sdpBndIgmpSnpgTxSrcSpecQueries	The value of the object sdpBndIgmpSnpgTxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV1Reports	long	sdpBndIgmpSnpgTxV1Reports	The value of the object sdpBndIgmpSnpgTxV1Reports indicates the number of IGMPv1 Reports transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV2Leaves	long	sdpBndIgmpSnpgTxV2Leaves	The value of the object sdpBndIgmpSnpgTxV2Leaves indicates the number of IGMPv2 Leaves transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV2Reports	long	sdpBndIgmpSnpgTxV2Reports	The value of the object sdpBndIgmpSnpgTxV2Reports indicates the number of IGMPv2 Reports transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV3Reports	long	sdpBndIgmpSnpgTxV3Reports	The value of the object sdpBndIgmpSnpgTxV3Reports indicates the number of IGMPv3 Reports transmitted on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
TunnelKeepAliveStats MIB table name: TIMETRA-SDP-MIB.sdpInfoTable Monitored class: svt.Tunnel			
lateHelloResponses	long	sdpKeepAliveNumLateHelloResponseMessages	The number of SDP Echo Response messages received after the corresponding Request timeout timer expired.
receivedHelloMessages	long	sdpKeepAliveNumHelloResponseMessages	The number of SDP Echo Response messages received since the keep-alive was administratively enabled or the counter was cleared.
transmittedHelloMessages	long	sdpKeepAliveNumHelloRequestMessages	The number of SDP Echo Request messages transmitted since the keep-alive was administratively enabled or the counter was cleared.

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5620 SAM counter name	Type	MIB counter name	Description
DS1CurrentStats MIB table name: DS1-MIB.dsx1CurrentTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1CurrentBESs	The number of Bursty Errored Seconds.
controlledSlipSeconds	long	dsx1CurrentCSSs	The number of Controlled Slip Seconds.
degradedMinutes	long	dsx1CurrentDMs	The number of Degraded Minutes.
erroredSeconds	long	dsx1CurrentESs	The number of Errored Seconds.
lineCodingViolations	long	dsx1CurrentLCVs	The number of Line Code Violations (LCVs).
lineErroredSeconds	long	dsx1CurrentLESs	The number of Line Errored Seconds.
pBitCodingViolations	long	dsx1CurrentPCVs	The number of Path Coding Violations.
severelyErroredFramingSeconds	long	dsx1CurrentSEFSs	The number of Severely Errored Framing Seconds.
severelyErroredSeconds	long	dsx1CurrentSESs	The number of Severely Errored Seconds.
unavailableSeconds	long	dsx1CurrentUASs	The number of Unavailable Seconds.
DS1FarEndCurrentStats MIB table name: DS1-MIB.dsx1FarEndCurrentTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1FarEndCurrentBESs	The number of Far End Bursty Errored Seconds.
controlledSlipSeconds	long	dsx1FarEndCurrentCSSs	The number of Far End Controlled Slip Seconds.
degradedMinutes	long	dsx1FarEndCurrentDMs	The number of Far End Degraded Minutes.
erroredSeconds	long	dsx1FarEndCurrentESs	The number of Far End Errored Seconds.

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5620 SAM counter name	Type	MIB counter name	Description
invalidIntervals	int	dsx1FarEndInvalidIntervals	The number of intervals in the range from 0 to dsx1FarEndValidIntervals for which no data is available. This object will typically be zero except in cases where the data for some intervals are not available (e.g., in proxy situations).
lineErroredSeconds	long	dsx1FarEndCurrentLESs	The number of Far End Line Errored Seconds.
pathCodingViolations	long	dsx1FarEndCurrentPCVs	The number of Far End Path Coding Violations.
severelyErroredFramingSeconds	long	dsx1FarEndCurrentSEFSs	The number of Far End Severely Errored Framing Seconds.
severelyErroredSeconds	long	dsx1FarEndCurrentSESs	The number of Far End Severely Errored Seconds.
timeElapsed	int	dsx1FarEndTimeElapsed	The number of seconds that have elapsed since the beginning of the far end current error-measurement period. If, for some reason, such as an adjustment in the system's time-of-day clock, the current interval exceeds the maximum value, the agent will return the maximum value.
unavailableSeconds	long	dsx1FarEndCurrentUASs	The number of Unavailable Seconds.
validIntervals	int	dsx1FarEndValidIntervals	The number of previous far end intervals for which data was collected. The value will be 96 unless the interface was brought online within the last 24 hours, in which case the value will be the number of complete 15 minute far end intervals since the interface has been online. In the case where the agent is a proxy, it is possible that some intervals are unavailable. In this case, this interval is the maximum interval number for which data is available.
DS1FarEndIntervalStats MIB table name: DS1-MIB.dsx1FarEndIntervalTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1FarEndIntervalBESs	The number of Far End Bursty Errored Seconds.
controlledSlipSeconds	long	dsx1FarEndIntervalCSSs	The number of Far End Controlled Slip Seconds.
degradedMinutes	long	dsx1FarEndIntervalDMs	The number of Far End Degraded Minutes.
erroredSeconds	long	dsx1FarEndIntervalESs	The number of Far End Errored Seconds.
intervalNumber	int	dsx1FarEndIntervalNumber	A number between 1 and 96, where 1 is the most recently completed 15 minute interval and 96 is the 15 minutes interval completed 23 hours and 45 minutes prior to interval 1.
lineErroredSeconds	long	dsx1FarEndIntervalLESs	The number of Far End Line Errored Seconds.
pathCodingViolations	long	dsx1FarEndIntervalPCVs	The number of Far End Path Coding Violations.

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5620 SAM counter name	Type	MIB counter name	Description
severelyErroredFramingSeconds	long	dsx1FarEndIntervalSEFSs	The number of Far End Severely Errored Framing Seconds.
severelyErroredSeconds	long	dsx1FarEndIntervalSESs	The number of Far End Severely Errored Seconds.
unavailableSeconds	long	dsx1FarEndIntervalUASs	The number of Unavailable Seconds.
DS1FarEndTotalStats MIB table name: DS1-MIB.dsx1FarEndTotalTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1FarEndTotalBESs	The number of Bursty Errored Seconds (BESs) encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
controlledSlipSeconds	long	dsx1FarEndTotalCSSs	The number of Far End Controlled Slip Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
degradedMinutes	long	dsx1FarEndTotalDMs	The number of Degraded Minutes (DMs) encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
erroredSeconds	long	dsx1FarEndTotalESs	The number of Far End Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
lineErroredSeconds	long	dsx1FarEndTotalLESs	The number of Far End Line Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pathCodingViolations	long	dsx1FarEndTotalPCVs	The number of Far End Path Coding Violations reported via the far end block error count encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredFramingSeconds	long	dsx1FarEndTotalSEFSs	The number of Far End Severely Errored Framing Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredSeconds	long	dsx1FarEndTotalSESs	The number of Far End Severely Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
unavailableSeconds	long	dsx1FarEndTotalUASs	The number of Unavailable Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
DS1IntervalStats MIB table name: DS1-MIB.dsx1IntervalTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1IntervalBESs	The number of Bursty Errored Seconds.
controlledSlipSeconds	long	dsx1IntervalCSSs	The number of Controlled Slip Seconds.
degradedMinutes	long	dsx1IntervalDMs	The number of Degraded Minutes.

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5620 SAM counter name	Type	MIB counter name	Description
erroredSeconds	long	dsx1IntervalESs	The number of Errored Seconds.
intervalNumber	int	dsx1IntervalNumber	A number between 1 and 96, where 1 is the most recently completed 15 minute interval and 96 is the 15 minutes interval completed 23 hours and 45 minutes prior to interval 1.
lineCodingViolations	long	dsx1IntervalLCVs	The number of Line Code Violations.
lineErroredSeconds	long	dsx1IntervalLESs	The number of Line Errored Seconds.
pBitCodingViolations	long	dsx1IntervalPCVs	The number of Path Coding Violations.
severelyErroredFramingSeconds	long	dsx1IntervalSEFSs	The number of Severely Errored Framing Seconds.
severelyErroredSeconds	long	dsx1IntervalSESs	The number of Severely Errored Seconds.
unavailableSeconds	long	dsx1IntervalUASs	The number of Unavailable Seconds. This object may decrease if the occurrence of unavailable seconds occurs across an interval boundary.
DS1TotalStats MIB table name: DS1-MIB.dsx1TotalTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1TotalBESs	The number of Bursty Errored Seconds (BESs) encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
controlledSlipSeconds	long	dsx1TotalCSSs	The number of Controlled Slip Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
degradedMinutes	long	dsx1TotalDMs	The number of Degraded Minutes (DMs) encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
erroredSeconds	long	dsx1TotalESs	The sum of Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
lineCodingViolations	long	dsx1TotalLCVs	The number of Line Code Violations (LCVs) encountered by a DS1 interface in the current 15 minute interval. Invalid 15 minute intervals count as 0.
lineErroredSeconds	long	dsx1TotalLESs	The number of Line Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pBitCodingViolations	long	dsx1TotalPCVs	The number of Path Coding Violations encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredFramingSeconds	long	dsx1TotalSEFSs	The number of Severely Errored Framing Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.

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5620 SAM counter name	Type	MIB counter name	Description
severelyErroredSeconds	long	dsx1TotalSESs	The number of Severely Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
unavailableSeconds	long	dsx1TotalUASs	The number of Unavailable Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
DS3CurrentStats MIB table name: DS3-MIB.dsx3CurrentTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3CurrentCCVs	The number of C-bit Coding Violations.
cBitErroredSeconds	long	dsx3CurrentCESs	The number of C-bit Errored Seconds.
cBitSeverelyErroredSeconds	long	dsx3CurrentCSESs	The number of C-bit Severely Errored Seconds.
lineCodingViolations	long	dsx3CurrentLCVs	The counter associated with the number of Line Coding Violations.
lineErroredSeconds	long	dsx3CurrentLESs	The number of Line Errored Seconds.
pBitCodingViolations	long	dsx3CurrentPCVs	The counter associated with the number of P-bit Coding Violations.
pBitErroredSeconds	long	dsx3CurrentPESs	The counter associated with the number of P-bit Errored Seconds.
pBitSeverelyErroredSeconds	long	dsx3CurrentPSESs	The counter associated with the number of P-bit Severely Errored Seconds.
severelyErroredFramingSeconds	long	dsx3CurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds.
unavailableSeconds	long	dsx3CurrentUASs	The counter associated with the number of Unavailable Seconds.
DS3FarEndCurrentStats MIB table name: DS3-MIB.dsx3FarEndCurrentTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3FarEndCurrentCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count.
cBitErroredSeconds	long	dsx3FarEndCurrentCESs	The counter associated with the number of Far End C-bit Errored Seconds.
cBitSeverelyErroredSeconds	long	dsx3FarEndCurrentCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds.
invalidIntervals	int	dsx3FarEndInvalidIntervals	The number of intervals in the range from 0 to dsx3FarEndValidIntervals for which no data is available. This object will typically be zero except in cases where the data for some intervals are not available (e.g., in proxy situations).

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5620 SAM counter name	Type	MIB counter name	Description
timeElapsed	int	dsx3FarEndTimeElapsed	The number of seconds that have elapsed since the beginning of the far end current error-measurement period. If, for some reason, such as an adjustment in the system's time-of-day clock, the current interval exceeds the maximum value, the agent will return the maximum value.
unavailableSeconds	long	dsx3FarEndCurrentUASs	The counter associated with the number of Far End unavailable seconds.
validIntervals	int	dsx3FarEndValidIntervals	The number of previous far end intervals for which data was collected. The value will be 96 unless the interface was brought online within the last 24 hours, in which case the value will be the number of complete 15 minute far end intervals since the interface has been online. In the case where the agent is a proxy, it is possible that some intervals are unavailable. In this case, this interval is the maximum interval number for which data is available.
DS3FarEndIntervalStats MIB table name: DS3-MIB.dsx3FarEndIntervalTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3FarEndIntervalCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count.
cBitErroredSeconds	long	dsx3FarEndIntervalCESs	The counter associated with the number of Far End C-bit Errored Seconds encountered by a DS3 interface in one of the previous 96, individual 15 minute, intervals. In the case where the agent is a proxy and data is not available, return noSuchInstance.
cBitSeverelyErroredSeconds	long	dsx3FarEndIntervalCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds.
intervalNumber	int	dsx3FarEndIntervalNumber	A number between 1 and 96, where 1 is the most recently completed 15 minute interval and 96 is the 15 minutes interval completed 23 hours and 45 minutes prior to interval 1.
unavailableSeconds	long	dsx3FarEndIntervalUASs	The counter associated with the number of Far End unavailable seconds.
DS3FarEndTotalStats MIB table name: DS3-MIB.dsx3FarEndTotalTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3FarEndTotalCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.

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5620 SAM counter name	Type	MIB counter name	Description
cBitErroredSeconds	long	dsx3FarEndTotalCESs	The counter associated with the number of Far End C-bit Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
cBitSeverelyErroredSeconds	long	dsx3FarEndTotalCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
unavailableSeconds	long	dsx3FarEndTotalUASs	The counter associated with the number of Far End unavailable seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
DS3IntervalStats MIB table name: DS3-MIB.dsx3IntervalTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3IntervalCCVs	The number of C-bit Coding Violations.
cBitErroredSeconds	long	dsx3IntervalCESs	The number of C-bit Errored Seconds.
cBitSeverelyErroredSeconds	long	dsx3IntervalCSESs	The number of C-bit Severely Errored Seconds.
intervalNumber	int	dsx3IntervalNumber	A number between 1 and 96, where 1 is the most recently completed 15 minute interval and 96 is the 15 minutes interval completed 23 hours and 45 minutes prior to interval 1.
lineCodingViolations	long	dsx3IntervalLCVs	The counter associated with the number of Line Coding Violations.
lineErroredSeconds	long	dsx3IntervalLESs	The number of Line Errored Seconds (BPVs or illegal zero sequences).
pBitCodingViolations	long	dsx3IntervalPCVs	The counter associated with the number of P-bit Coding Violations.
pBitErroredSeconds	long	dsx3IntervalPESs	The counter associated with the number of P-bit Errored Seconds.
pBitSeverelyErroredSeconds	long	dsx3IntervalPSESs	The counter associated with the number of P-bit Severely Errored Seconds.
severelyErroredFramingSeconds	long	dsx3IntervalSEFSs	The counter associated with the number of Severely Errored Framing Seconds.
unavailableSeconds	long	dsx3IntervalUASs	The counter associated with the number of Unavailable Seconds. This object may decrease if the occurrence of unavailable seconds occurs across an interval boundary.
DS3TotalStats MIB table name: DS3-MIB.dsx3TotalTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3TotalCCVs	The number of C-bit Coding Violations encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.

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5620 SAM counter name	Type	MIB counter name	Description
cBitErroredSeconds	long	dsx3TotalCESs	The number of C-bit Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
cBitSeverelyErroredSeconds	long	dsx3TotalCSESs	The number of C-bit Severely Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
lineCodingViolations	long	dsx3TotalLCVs	The counter associated with the number of Line Coding Violations encountered by a DS3/E3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
lineErroredSeconds	long	dsx3TotalLESs	The number of Line Errored Seconds (BPVs or illegal zero sequences) encountered by a DS3/E3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pBitCodingViolations	long	dsx3TotalPCVs	The counter associated with the number of P-bit Coding Violations, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pBitErroredSeconds	long	dsx3TotalPESs	The counter associated with the number of P-bit Errored Seconds, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pBitSeverelyErroredSeconds	long	dsx3TotalPSESs	The counter associated with the number of P-bit Severely Errored Seconds, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredFramingSeconds	long	dsx3TotalSEFSs	The counter associated with the number of Severely Errored Framing Seconds, encountered by a DS3/E3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
unavailableSeconds	long	dsx3TotalUASs	The counter associated with the number of Unavailable Seconds, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.

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5620 SAM counter name	Type	MIB counter name	Description
CircuitDhcpRelayCfgStats MIB table name: TIMETRA-SDP-MIB.sdpBindDhcpStatsTable Monitored class: svt.SdpBinding			

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5620 SAM counter name	Type	MIB counter name	Description
sdpBindDhcpStatsClntDropdPckts	long	sdpBindDhcpStatsClntDropdPckts	The value of the object sdpBindDhcpStatsClntDropdPckts indicates the number of DHCP client packets that have been dropped on this SDP bind.
sdpBindDhcpStatsClntForwdPckts	long	sdpBindDhcpStatsClntForwdPckts	The value of the object sdpBindDhcpStatsClntForwdPckts indicates the number of DHCP client packets that have been forwarded on this SDP bind.
sdpBindDhcpStatsClntProxLSPckts	long	sdpBindDhcpStatsClntProxLSPckts	The value of the object sdpBindDhcpStatsClntProxLSPckts indicates the number of DHCP client packets that have been proxied on this SDP bind based on a lease state. The lease itself can have been obtained from a DHCP or RADIUS server. This is the so called lease split functionality.
sdpBindDhcpStatsClntProxRadPckts	long	sdpBindDhcpStatsClntProxRadPckts	The value of the object sdpBindDhcpStatsClntProxRadPckts indicates the number of DHCP client packets that have been proxied on this SDP bind based on data received from a RADIUS server.
sdpBindDhcpStatsClntSnoopdPckts	long	sdpBindDhcpStatsClntSnoopdPckts	The value of the object sdpBindDhcpStatsClntSnoopdPckts indicates the number of DHCP client packets that have been snooped on this SDP bind.
sdpBindDhcpStatsGenForceRenPckts	long	sdpBindDhcpStatsGenForceRenPckts	The value of the object sdpBindDhcpStatsGenForceRenPckts indicates the number of DHCP FORCERENEW messages spoofed on this SDP bind to the DHCP clients.
sdpBindDhcpStatsGenReleasePckts	long	sdpBindDhcpStatsGenReleasePckts	The value of the object sdpBindDhcpStatsGenReleasePckts indicates the number of DHCP RELEASE messages spoofed on this SDP bind to the DHCP server.
sdpBindDhcpStatsSrvrDropdPckts	long	sdpBindDhcpStatsSrvrDropdPckts	The value of the object sdpBindDhcpStatsSrvrDropdPckts indicates the number of DHCP server packets that have been dropped on this SDP bind.
sdpBindDhcpStatsSrvrForwdPckts	long	sdpBindDhcpStatsSrvrForwdPckts	The value of the object sdpBindDhcpStatsSrvrForwdPckts indicates the number of DHCP server packets that have been forwarded on this SDP bind.
sdpBindDhcpStatsSrvrSnoopdPckts	long	sdpBindDhcpStatsSrvrSnoopdPckts	The value of the object sdpBindDhcpStatsSrvrSnoopdPckts indicates the number of DHCP server packets that have been snooped on this SDP bind.

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5620 SAM counter name	Type	MIB counter name	Description
InterfacePimSnoopingStats MIB table name: TIMETRA-PIM-SNOOPING-MIB.tmnxPimSnpgIfStatsTable Monitored class: vpls.InterfacePimSnooping			
tmnxPimSnpgIfJoinPolicyDrops	long	tmnxPimSnpgIfJoinPolicyDrops	The value of tmnxPimSnpgIfJoinPolicyDrops indicates the number of times the join policy match resulted in dropping PIM Join-Prune Message or one of the source group contained in the message.
tmnxPimSnpgIfRxBadChecksumDscrd	long	tmnxPimSnpgIfRxBadChecksumDscrd	The value of tmnxPimSnpgIfRxBadChecksumDscrd indicates the number of PIM messages received on this interface which were discarded because of bad checksum.
tmnxPimSnpgIfRxBadEncodings	long	tmnxPimSnpgIfRxBadEncodings	The value of tmnxPimSnpgIfRxBadEncodings indicates the number of PIM messages with bad encodings received on this interface.
tmnxPimSnpgIfRxBadVersionDscrd	long	tmnxPimSnpgIfRxBadVersionDscrd	The value of tmnxPimSnpgIfRxBadVersionDscrd indicates the number of PIM messages with bad versions received on this interface.
tmnxPimSnpgIfRxHellos	long	tmnxPimSnpgIfRxHellos	The value of tmnxPimSnpgIfRxHellos indicates the number of PIM hello messages received on this interface.
tmnxPimSnpgIfRxHellosDropped	long	tmnxPimSnpgIfRxHellosDropped	The value of tmnxPimSnpgIfRxHellosDropped indicates the number of PIM Hello messages which were received on this interface but were dropped.
tmnxPimSnpgIfRxJoinPruneErrs	long	tmnxPimSnpgIfRxJoinPruneErrs	The value of tmnxPimSnpgIfRxJoinPruneErrs indicates the number of errors while processing Join-Prune messages received on this interface.
tmnxPimSnpgIfRxJoinPrunes	long	tmnxPimSnpgIfRxJoinPrunes	The value of tmnxPimSnpgIfRxJoinPrunes indicates the number of PIM Join Prune messages received on this interface.
tmnxPimSnpgIfRxNbrUnknown	long	tmnxPimSnpgIfRxNbrUnknown	The value of tmnxPimSnpgIfRxNbrUnknown indicates the number of PIM messages (other than Hello messages) which were received on this interface and were rejected because the adjacency with the neighbor router was not already established.
tmnxPimSnpgIfRxPkts	long	tmnxPimSnpgIfRxPkts	The value of tmnxPimSnpgIfRxPkts indicates the number of multicast data packets received on this interface.
tmnxPimSnpgIfSGTypes	long	tmnxPimSnpgIfSGTypes	The value of tmnxPimSnpgIfSGTypes indicates the number of (S,G) entries in tmnxPimSnpgIfGrpSrcTable.
tmnxPimSnpgIfStarGTypes	long	tmnxPimSnpgIfStarGTypes	The value of tmnxPimSnpgIfStarGTypes indicates the number of (*,G) entries in tmnxPimSnpgIfGrpSrcTable.

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5620 SAM counter name	Type	MIB counter name	Description
tmnxPimSnpgIfTxJoinPrunes	long	tmnxPimSnpgIfTxJoinPrunes	The value of tmnxPimSnpgIfTxJoinPrunes indicates the number of PIM Join Prune messages transmitted on this interface.
tmnxPimSnpgIfTxPkts	long	tmnxPimSnpgIfTxPkts	The value of tmnxPimSnpgIfTxPkts indicates the number of multicast data packets transmitted on this interface.
L2AccessInterfaceIgmpSnpgErrorStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sapIgmpSnpgStatsTable Monitored classes: • vpls.AbstractL2AccessInterface • vpls.IL2AccessInterface • mvpls.IL2AccessInterface			
sapIgmpSnpgImportPolicyDrops	long	sapIgmpSnpgImportPolicyDrops	The value of the object sapIgmpSnpgImportPolicyDrops indicates the number of times an IGMP Group or Source is dropped because of applying an import policy on this SAP.
sapIgmpSnpgMaxNumGroupsDrops	long	sapIgmpSnpgMaxNumGroupsDrops	The value of the object sapIgmpSnpgMaxNumGroupsDrops indicates the number of times an IGMP Group is dropped because of exceeding the configured maximum number of groups on this SAP.
sapIgmpSnpgMaxNumSourcesDrops	long	sapIgmpSnpgMaxNumSourcesDrops	The value of the object sapIgmpSnpgMaxNumSourcesDrops indicates the number of times an IGMP Source is dropped because of exceeding the configured maximum number of sources per group on this SAP.
sapIgmpSnpgMcacPolicyDrops	long	sapIgmpSnpgMcacPolicyDrops	The value of the object sapIgmpSnpgMcacPolicyDrops indicates the number of times an IGMP Group is dropped because of applying a multicast CAC policy on this SAP.
sapIgmpSnpgMcsFailures	long	sapIgmpSnpgMcsFailures	The value of the object sapIgmpSnpgMcsFailures indicates the number of times an IGMP Group on this SAP could not be synced to the MCS (multi-chassis synchronization) database.
sapIgmpSnpgRxBadEncodedPkts	long	sapIgmpSnpgRxBadEncodedPkts	The value of the object sapIgmpSnpgRxBadEncodedPkts indicates the number of IGMP packets dropped on this SAP because of a bad encoding.
sapIgmpSnpgRxBadIgmpChksmPkts	long	sapIgmpSnpgRxBadIgmpChksmPkts	The value of the object sapIgmpSnpgRxBadIgmpChksmPkts indicates the number of dropped IGMP packets on this SAP because of a bad IGMP header checksum.
sapIgmpSnpgRxBadIpChksmPkts	long	sapIgmpSnpgRxBadIpChksmPkts	The value of the object sapIgmpSnpgRxBadIpChksmPkts indicates the number of dropped IGMP packets on this SAP because of a bad IPv4 header checksum.

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgRxBadLenPkts	long	sapIgmpSnpgRxBadLenPkts	The value of the object sapIgmpSnpgRxBadLenPkts indicates the number of IGMP packets dropped on this SAP because of a bad length.
sapIgmpSnpgRxNoRtrAlertPkts	long	sapIgmpSnpgRxNoRtrAlertPkts	The value of the object sapIgmpSnpgRxNoRtrAlertPkts indicates the number of IGMP packets dropped on this SAP because the Router Alert Option in the IP packet is not set.
sapIgmpSnpgRxWrongVersionPkts	long	sapIgmpSnpgRxWrongVersionPkts	The value of the object sapIgmpSnpgRxWrongVersionPkts indicates the total number of IGMP packets with a wrong version received on this SAP.
sapIgmpSnpgRxZeroSrcAdrPkts	long	sapIgmpSnpgRxZeroSrcAdrPkts	The value of the object sapIgmpSnpgRxZeroSrcAdrPkts indicates the number of IGMP packets dropped on this SAP because they contain a zero source IPv4 address.
sapIgmpSnpgSendQueryCfgDrops	long	sapIgmpSnpgSendQueryCfgDrops	The value of the object sapIgmpSnpgSendQueryCfgDrops indicates the number of times an IGMP Query is dropped because the object sapIgmpSnpgCfgSendQueries for this SAP is set to 'enabled(1)'.
L2AccessInterfaceIgmpSnpgStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sapIgmpSnpgStatsTable Monitored classes: • vpls.AbstractL2AccessInterface • vpls.IL2AccessInterface • mvpls.IL2AccessInterface			
sapIgmpSnpgFwdGenQueries	long	sapIgmpSnpgFwdGenQueries	The value of the object sapIgmpSnpgFwdGenQueries indicates the number of IGMP General Queries forwarded on this SAP.
sapIgmpSnpgFwdGrpSpecQueries	long	sapIgmpSnpgFwdGrpSpecQueries	The value of the object sapIgmpSnpgFwdGrpSpecQueries indicates the number of IGMP Group-Specific Queries forwarded on this SAP.
sapIgmpSnpgFwdSrcSpecQueries	long	sapIgmpSnpgFwdSrcSpecQueries	The value of the object sapIgmpSnpgFwdSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries forwarded on this SAP.
sapIgmpSnpgFwdUnknownType	long	sapIgmpSnpgFwdUnknownType	The value of the object sapIgmpSnpgFwdUnknownType indicates the number of IGMP unknown type packets forwarded on this SAP.
sapIgmpSnpgFwdV1Reports	long	sapIgmpSnpgFwdV1Reports	The value of the object sapIgmpSnpgFwdV1Reports indicates the number of IGMPv1 Reports forwarded on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgFwdV2Leaves	long	sapIgmpSnpgFwdV2Leaves	The value of the object sapIgmpSnpgFwdV2Leaves indicates the number of IGMPv2 Leaves forwarded on this SAP.
sapIgmpSnpgFwdV2Reports	long	sapIgmpSnpgFwdV2Reports	The value of the object sapIgmpSnpgFwdV2Reports indicates the number of IGMPv2 Reports forwarded on this SAP.
sapIgmpSnpgFwdV3Reports	long	sapIgmpSnpgFwdV3Reports	The value of the object sapIgmpSnpgFwdV3Reports indicates the number of IGMPv3 Reports forwarded on this SAP.
sapIgmpSnpgRxGenQueries	long	sapIgmpSnpgRxGenQueries	The value of the object sapIgmpSnpgRxGenQueries indicates the number of IGMP General Queries received on this SAP.
sapIgmpSnpgRxGrpSpecQueries	long	sapIgmpSnpgRxGrpSpecQueries	The value of the object sapIgmpSnpgRxGrpSpecQueries indicates the number of IGMP Group-Specific Queries received on this SAP.
sapIgmpSnpgRxSrcSpecQueries	long	sapIgmpSnpgRxSrcSpecQueries	The value of the object sapIgmpSnpgRxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries received on this SAP.
sapIgmpSnpgRxUnknownType	long	sapIgmpSnpgRxUnknownType	The value of the object sapIgmpSnpgRxUnknownType indicates the number of IGMP unknown type packets received on this SAP.
sapIgmpSnpgRxV1Reports	long	sapIgmpSnpgRxV1Reports	The value of the object sapIgmpSnpgRxV1Reports indicates the number of IGMPv1 Reports received on this SAP.
sapIgmpSnpgRxV2Leaves	long	sapIgmpSnpgRxV2Leaves	The value of the object sapIgmpSnpgRxV2Leaves indicates the number of IGMPv2 Leaves received on this SAP.
sapIgmpSnpgRxV2Reports	long	sapIgmpSnpgRxV2Reports	The value of the object sapIgmpSnpgRxV2Reports indicates the number of IGMPv2 Reports received on this SAP.
sapIgmpSnpgRxV3Reports	long	sapIgmpSnpgRxV3Reports	The value of the object sapIgmpSnpgRxV3Reports indicates the number of IGMPv3 Reports received on this SAP.
sapIgmpSnpgTxGenQueries	long	sapIgmpSnpgTxGenQueries	The value of the object sapIgmpSnpgTxGenQueries indicates the number of IGMP General Queries transmitted on this SAP.
sapIgmpSnpgTxGrpSpecQueries	long	sapIgmpSnpgTxGrpSpecQueries	The value of the object sapIgmpSnpgTxGrpSpecQueries indicates the number of IGMP Group-Specific Queries transmitted on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgTxSrcSpecQueries	long	sapIgmpSnpgTxSrcSpecQueries	The value of the object sapIgmpSnpgTxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries transmitted on this SAP.
sapIgmpSnpgTxV1Reports	long	sapIgmpSnpgTxV1Reports	The value of the object sapIgmpSnpgTxV1Reports indicates the number of IGMPv1 Reports transmitted on this SAP.
sapIgmpSnpgTxV2Leaves	long	sapIgmpSnpgTxV2Leaves	The value of the object sapIgmpSnpgTxV2Leaves indicates the number of IGMPv2 Leaves transmitted on this SAP.
sapIgmpSnpgTxV2Reports	long	sapIgmpSnpgTxV2Reports	The value of the object sapIgmpSnpgTxV2Reports indicates the number of IGMPv2 Reports transmitted on this SAP.
sapIgmpSnpgTxV3Reports	long	sapIgmpSnpgTxV3Reports	The value of the object sapIgmpSnpgTxV3Reports indicates the number of IGMPv3 Reports transmitted on this SAP.
L2AccessInterfaceMldMvrStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sapMldSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapMldSnpgMvrFromVplsCfgDrops	long	sapMldSnpgMvrFromVplsCfgDrops	The value of the object sapMldSnpgMvrFromVplsCfgDrops indicates the number of times an MLD group or Query is dropped because of applying the sapMldSnpgCfgMvrFromVplsId configuration on this SAP.
sapMldSnpgMvrToSapCfgDrops	long	sapMldSnpgMvrToSapCfgDrops	The value of the object sapMldSnpgMvrToSapCfgDrops indicates the number times an MLD Report or Query is dropped because of applying the sapMldSnpgCfgMvrToSapPortId and sapMldSnpgCfgMvrToSapEncapVal configuration on this SAP.
L2AccessInterfaceMldSnpgErrorStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sapMldSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapMldSnpgImportPolicyDrops	long	sapMldSnpgImportPolicyDrops	The value of the object sapMldSnpgImportPolicyDrops indicates the number of times an MLD group or source is dropped because of applying an import policy on this SAP.
sapMldSnpgMaxNumGroupsDrops	long	sapMldSnpgMaxNumGroupsDrops	The value of the object sapMldSnpgMaxNumGroupsDrops indicates the number of times an MLD group is dropped because of exceeding the configured maximum number of groups on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapMldSnpgMcsFailures	long	sapMldSnpgMcsFailures	The value of the object sapMldSnpgMcsFailures indicates the number of times an MLD group on this SAP could not be synced to the MCS (multi-chassis synchronization) database.
sapMldSnpgRxBadEncodedPkts	long	sapMldSnpgRxBadEncodedPkts	The value of the object sapMldSnpgRxBadEncodedPkts indicates the number of MLD packets dropped on this SAP because of a bad encoding.
sapMldSnpgRxBadLenPkts	long	sapMldSnpgRxBadLenPkts	The value of the object sapMldSnpgRxBadLenPkts indicates the number of MLD packets dropped on this SAP because of a bad length.
sapMldSnpgRxBadMldChksmPkts	long	sapMldSnpgRxBadMldChksmPkts	The value of the object sapMldSnpgRxBadMldChksmPkts indicates the number of dropped MLD packets on this SAP because of a bad MLD header checksum.
sapMldSnpgRxNoRtrAlertPkts	long	sapMldSnpgRxNoRtrAlertPkts	The value of the object sapMldSnpgRxNoRtrAlertPkts indicates the number of MLD packets dropped on this SAP because the Router Alert Option in the IP packet is not set.
sapMldSnpgRxWrongVersionPkts	long	sapMldSnpgRxWrongVersionPkts	The value of the object sapMldSnpgRxWrongVersionPkts indicates the total number of MLD packets with a wrong version received on this SAP.
sapMldSnpgRxZeroSrcAdrPkts	long	sapMldSnpgRxZeroSrcAdrPkts	The value of the object sapMldSnpgRxZeroSrcAdrPkts indicates the number of MLD packets dropped on this SAP because they contain a zero source IPv6 address.
sapMldSnpgSendQueryCfgDrops	long	sapMldSnpgSendQueryCfgDrops	The value of the object sapMldSnpgSendQueryCfgDrops indicates the number of times an MLD Query is dropped because the object sapMldSnpgCfgSendQueries for this SAP is set to 'inService(2)'.
L2AccessInterfaceMldSnpgStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sapMldSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapMldSnpgFwdGenQueries	long	sapMldSnpgFwdGenQueries	The value of the object sapMldSnpgFwdGenQueries indicates the number of MLD General Queries forwarded on this SAP.
sapMldSnpgFwdGrpSpecQueries	long	sapMldSnpgFwdGrpSpecQueries	The value of the object sapMldSnpgFwdGrpSpecQueries indicates the number of MLD Group-Specific Queries forwarded on this SAP.
sapMldSnpgFwdSrcSpecQueries	long	sapMldSnpgFwdSrcSpecQueries	The value of the object sapMldSnpgFwdSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries forwarded on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapMldSnpgFwdUnknownType	long	sapMldSnpgFwdUnknown Type	The value of the object sapMldSnpgFwdUnknownType indicates the number of MLD unknown type packets forwarded on this SAP.
sapMldSnpgFwdV1Leaves	long	sapMldSnpgFwdV1Leaves	The value of the object sapMldSnpgFwdV1Leaves indicates the number of MLDv1 Leaves forwarded on this SAP.
sapMldSnpgFwdV1Reports	long	sapMldSnpgFwdV1Reports	The value of the object sapMldSnpgFwdV1Reports indicates the number of MLDv1 Reports forwarded on this SAP.
sapMldSnpgFwdV2Reports	long	sapMldSnpgFwdV2Reports	The value of the object sapMldSnpgFwdV2Reports indicates the number of MLDv2 Reports forwarded on this SAP.
sapMldSnpgRxGenQueries	long	sapMldSnpgRxGenQueries	The value of the object sapMldSnpgRxGenQueries indicates the number of MLD General Queries received on this SAP.
sapMldSnpgRxGrpSpecQueries	long	sapMldSnpgRxGrpSpecQu eries	The value of the object sapMldSnpgRxGrpSpecQueries indicates the number of MLD Group-Specific Queries received on this SAP.
sapMldSnpgRxLocalScopePkts	long	sapMldSnpgRxLocalScope Pkts	The value of the object sapMldSnpgRxLocalScopePkts indicates the number of MLD packets received on the link-local scope IPv6 multicast address.
sapMldSnpgRxRsvdScopePkts	long	sapMldSnpgRxRsvdScopeP kts	The value of the object sapMldSnpgRxRsvdScopePkts indicates the number of MLD packets received on the reserved scope IPv6 multicast address.
sapMldSnpgRxSrcSpecQueries	long	sapMldSnpgRxSrcSpecQue ries	The value of the object sapMldSnpgRxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries received on this SAP.
sapMldSnpgRxUnknownType	long	sapMldSnpgRxUnknownTy pe	The value of the object sapMldSnpgRxUnknownType indicates the number of MLD unknown type packets received on this SAP.
sapMldSnpgRxV1Leaves	long	sapMldSnpgRxV1Leaves	The value of the object sapMldSnpgRxV1Leaves indicates the number of MLDv1 Leaves received on this SAP.
sapMldSnpgRxV1Reports	long	sapMldSnpgRxV1Reports	The value of the object sapMldSnpgRxV1Reports indicates the number of MLDv1 Reports received on this SAP.
sapMldSnpgRxV2Reports	long	sapMldSnpgRxV2Reports	The value of the object sapMldSnpgRxV2Reports indicates the number of MLDv2 Reports received on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapMldSnpgTxGenQueries	long	sapMldSnpgTxGenQueries	The value of the object sapMldSnpgTxGenQueries indicates the number of MLD General Queries transmitted on this SAP.
sapMldSnpgTxGrpSpecQueries	long	sapMldSnpgTxGrpSpecQueries	The value of the object sapMldSnpgTxGrpSpecQueries indicates the number of MLD Group-Specific Queries transmitted on this SAP.
sapMldSnpgTxSrcSpecQueries	long	sapMldSnpgTxSrcSpecQueries	The value of the object sapMldSnpgTxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries transmitted on this SAP.
sapMldSnpgTxV1Leaves	long	sapMldSnpgTxV1Leaves	The value of the object sapMldSnpgTxV1Leaves indicates the number of MLDv1 Leaves transmitted on this SAP.
sapMldSnpgTxV1Reports	long	sapMldSnpgTxV1Reports	The value of the object sapMldSnpgTxV1Reports indicates the number of MLDv1 Reports transmitted on this SAP.
sapMldSnpgTxV2Reports	long	sapMldSnpgTxV2Reports	The value of the object sapMldSnpgTxV2Reports indicates the number of MLDv2 Reports transmitted on this SAP.
L2AccessInterfaceMvrStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sapIgmpSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapIgmpSnpgMvrFromVplsCfgDrops	long	sapIgmpSnpgMvrFromVplsCfgDrops	The value of the object sapIgmpSnpgMvrFromVplsCfgDrops indicates the number of times an IGMP Group or Query is dropped because of applying the sapIgmpSnpgCfgMvrFromVplsId configuration on this SAP.
sapIgmpSnpgMvrToSapCfgDrops	long	sapIgmpSnpgMvrToSapCfgDrops	The value of the object sapIgmpSnpgMvrToSapCfgDrops indicates the number times an IGMP Report or Query is dropped because of applying the sapIgmpSnpgCfgMvrToSapPortId and sapIgmpSnpgCfgMvrToSapEncapVal configuration on this SAP.
L2AccessItfDhcpRelayCfgStats MIB table name: TIMETRA-SAP-MIB.sapTlsDhcpStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapTlsDhcpStatsClntDropdPckts	long	sapTlsDhcpStatsClntDropdPckts	The value of the object sapTlsDhcpStatsClntDropdPckts indicates the number of DHCP client packets that have been dropped on this SAP.
sapTlsDhcpStatsClntForwdPckts	long	sapTlsDhcpStatsClntForwdPckts	The value of the object sapTlsDhcpStatsClntForwdPckts indicates the number of DHCP client packets that have been forwarded on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapTlsDhcpStatsClntProxLSPckts	long	sapTlsDhcpStatsClntProxLSPckts	The value of the object sapTlsDhcpStatsClntProxLSPckts indicates the number of DHCP client packets that have been proxied on this SAP based on a lease state. The lease itself can have been obtained from a DHCP or RADIUS server. This is the so called lease split functionality.
sapTlsDhcpStatsClntProxRadPckts	long	sapTlsDhcpStatsClntProxRadPckts	The value of the object sapTlsDhcpStatsClntProxRadPckts indicates the number of DHCP client packets that have been proxied on this SAP based on data received from a RADIUS server.
sapTlsDhcpStatsClntSnoopdPckts	long	sapTlsDhcpStatsClntSnoopdPckts	The value of the object sapTlsDhcpStatsClntSnoopdPckts indicates the number of DHCP client packets that have been snooped on this SAP.
sapTlsDhcpStatsGenForceRenPckts	long	sapTlsDhcpStatsGenForceRenPckts	The value of the object sapTlsDhcpStatsGenForceRenPckts indicates the number of DHCP FORCERENEW messages spoofed on this SAP to the DHCP clients.
sapTlsDhcpStatsGenReleasePckts	long	sapTlsDhcpStatsGenReleasePckts	The value of the object sapTlsDhcpStatsGenReleasePckts indicates the number of DHCP RELEASE messages spoofed on this SAP to the DHCP server.
sapTlsDhcpStatsSrvrDropdPckts	long	sapTlsDhcpStatsSrvrDropdPckts	The value of the object sapTlsDhcpStatsSrvrDropdPckts indicates the number of DHCP server packets that have been dropped on this SAP.
sapTlsDhcpStatsSrvrForwdPckts	long	sapTlsDhcpStatsSrvrForwdPckts	The value of the object sapTlsDhcpStatsSrvrForwdPckts indicates the number of DHCP server packets that have been forwarded on this SAP.
sapTlsDhcpStatsSrvrSnoopdPckts	long	sapTlsDhcpStatsSrvrSnoopdPckts	The value of the object sapTlsDhcpStatsSrvrSnoopdPckts indicates the number of DHCP server packets that have been snooped on this SAP.
SdpBindingMldSnpgErrorStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sdpBindMldSnpgStatsTable Monitored class: vpls.SdpBindingMldSnpgCfg			
sdpBndMldSnpgImportPolicyDrops	long	sdpBndMldSnpgImportPolicyDrops	The value of the object sdpBndMldSnpgImportPolicyDrops indicates the number of times an MLD group or source is dropped because of applying an import policy on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndMldSnpgMaxNumGroupsDrops	long	sdpBndMldSnpgMaxNumGroupsDrops	The value of the object sdpBndMldSnpgMaxNumGroupsDrops indicates the number of times an MLD group is dropped because of exceeding the configured maximum number of groups on this SDP Bind.
sdpBndMldSnpgRxBadEncodedPkts	long	sdpBndMldSnpgRxBadEncodedPkts	The value of the object sdpBndMldSnpgRxBadEncodedPkts indicates the number of MLD packets dropped on this SDP Bind because of a bad encoding.
sdpBndMldSnpgRxBadLenPkts	long	sdpBndMldSnpgRxBadLenPkts	The value of the object sdpBndMldSnpgRxBadLenPkts indicates the number of MLD packets dropped on this SDP Bind because of a bad length.
sdpBndMldSnpgRxBadMldChksmPkts	long	sdpBndMldSnpgRxBadMldChksmPkts	The value of the object sdpBndMldSnpgRxBadMldChksmPkts indicates the number of dropped MLD packets on this SDP Bind because of a bad MLD header checksum.
sdpBndMldSnpgRxLocalScopePkts	long	sdpBndMldSnpgRxLocalScopePkts	The value of the object sdpBndMldSnpgRxLocalScopePkts indicates the number of MLD packets received on the link-local scope IPv6 multicast address.
sdpBndMldSnpgRxNoRtrAlertPkts	long	sdpBndMldSnpgRxNoRtrAlertPkts	The value of the object sdpBndMldSnpgRxNoRtrAlertPkts indicates the number of MLD packets dropped on this SDP Bind because the Router Alert Option in the IP packet is not set.
sdpBndMldSnpgRxRsvdScopePkts	long	sdpBndMldSnpgRxRsvdScopePkts	The value of the object sdpBndMldSnpgRxRsvdScopePkts indicates the number of MLD packets received on the reserved scope IPv6 multicast address.
sdpBndMldSnpgRxWrongVersionPkts	long	sdpBndMldSnpgRxWrongVersionPkts	The value of the object sdpBndMldSnpgRxWrongVersionPkts indicates the total number of MLD packets with a wrong version received on this SDP Bind.
sdpBndMldSnpgRxZeroSrcAdrPkts	long	sdpBndMldSnpgRxZeroSrcAdrPkts	The value of the object sdpBndMldSnpgRxZeroSrcAdrPkts indicates the number of MLD packets dropped on this SDP Bind because they contain a zero source IPv6 address.
sdpBndMldSnpgSendQueryCfgDrops	long	sdpBndMldSnpgSendQueryCfgDrops	The value of the object sdpBndMldSnpgSendQueryCfgDrops indicates the number of times an MLD Query is dropped because the object sdpBndMldSnpgCfgSendQueries for this SDP Bind is set to 'inService(2)'.
SdpBindingMldSnpgStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sdpBindMldSnpgStatsTable Monitored class: vpls.SdpBindingMldSnpgCfg			

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndMldSnpgFwdGenQueries	long	sdpBndMldSnpgFwdGenQueries	The value of the object sdpBndMldSnpgFwdGenQueries indicates the number of MLD General Queries forwarded on this SDP Bind.
sdpBndMldSnpgFwdGrpSpecQueries	long	sdpBndMldSnpgFwdGrpSpecQueries	The value of the object sdpBndMldSnpgFwdGrpSpecQueries indicates the number of MLD Group-Specific Queries forwarded on this SDP Bind.
sdpBndMldSnpgFwdSrcSpecQueries	long	sdpBndMldSnpgFwdSrcSpecQueries	The value of the object sdpBndMldSnpgFwdSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries forwarded on this SDP Bind.
sdpBndMldSnpgFwdUnknownType	long	sdpBndMldSnpgFwdUnknownType	The value of the object sdpBndMldSnpgFwdUnknownType indicates the number of MLD unknown type packets forwarded on this SDP Bind.
sdpBndMldSnpgFwdV1Leaves	long	sdpBndMldSnpgFwdV1Leaves	The value of the object sdpBndMldSnpgFwdV1Leaves indicates the number of MLDv1 Leaves forwarded on this SDP Bind.
sdpBndMldSnpgFwdV1Reports	long	sdpBndMldSnpgFwdV1Reports	The value of the object sdpBndMldSnpgFwdV1Reports indicates the number of MLDv1 Reports forwarded on this SDP Bind.
sdpBndMldSnpgFwdV2Reports	long	sdpBndMldSnpgFwdV2Reports	The value of the object sdpBndMldSnpgFwdV2Reports indicates the number of MLDv2 Reports forwarded on this SDP Bind.
sdpBndMldSnpgRxGenQueries	long	sdpBndMldSnpgRxGenQueries	The value of the object sdpBndMldSnpgRxGenQueries indicates the number of MLD General Queries received on this SDP Bind.
sdpBndMldSnpgRxGrpSpecQueries	long	sdpBndMldSnpgRxGrpSpecQueries	The value of the object sdpBndMldSnpgRxGrpSpecQueries indicates the number of MLD Group-Specific Queries received on this SDP Bind.
sdpBndMldSnpgRxSrcSpecQueries	long	sdpBndMldSnpgRxSrcSpecQueries	The value of the object sdpBndMldSnpgRxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries received on this SDP Bind.
sdpBndMldSnpgRxUnknownType	long	sdpBndMldSnpgRxUnknownType	The value of the object sdpBndMldSnpgRxUnknownType indicates the number of MLD unknown type packets received on this SDP Bind.
sdpBndMldSnpgRxV1Leaves	long	sdpBndMldSnpgRxV1Leaves	The value of the object sdpBndMldSnpgRxV1Leaves indicates the number of MLDv1 Leaves received on this SDP Bind.
sdpBndMldSnpgRxV1Reports	long	sdpBndMldSnpgRxV1Reports	The value of the object sdpBndMldSnpgRxV1Reports indicates the number of MLDv1 Reports received on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndMldSnpgRxV2Reports	long	sdpBndMldSnpgRxV2Reports	The value of the object sdpBndMldSnpgRxV2Reports indicates the number of MLDv2 Reports received on this SDP Bind.
sdpBndMldSnpgTxGenQueries	long	sdpBndMldSnpgTxGenQueries	The value of the object sdpBndMldSnpgTxGenQueries indicates the number of MLD General Queries transmitted on this SDP Bind.
sdpBndMldSnpgTxGrpSpecQueries	long	sdpBndMldSnpgTxGrpSpecQueries	The value of the object sdpBndMldSnpgTxGrpSpecQueries indicates the number of MLD Group-Specific Queries transmitted on this SDP Bind.
sdpBndMldSnpgTxSrcSpecQueries	long	sdpBndMldSnpgTxSrcSpecQueries	The value of the object sdpBndMldSnpgTxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries transmitted on this SDP Bind.
sdpBndMldSnpgTxV1Leaves	long	sdpBndMldSnpgTxV1Leaves	The value of the object sdpBndMldSnpgTxV1Leaves indicates the number of MLDv1 Leaves transmitted on this SDP Bind.
sdpBndMldSnpgTxV1Reports	long	sdpBndMldSnpgTxV1Reports	The value of the object sdpBndMldSnpgTxV1Reports indicates the number of MLDv1 Reports transmitted on this SDP Bind.
sdpBndMldSnpgTxV2Reports	long	sdpBndMldSnpgTxV2Reports	The value of the object sdpBndMldSnpgTxV2Reports indicates the number of MLDv2 Reports transmitted on this SDP Bind.
SitePimSnoopingStats MIB table name: TIMETRA-PIM-SNOOPING-MIB.tmnxPimSnpgGenStatsTable Monitored class: vpls.SitePimSnooping			
numSGTypes	long	tmnxPimSnpgGenStatsSGTypes	The value of tmnxPimSnpgGenStatsSGTypes indicates the number of entries in tmnxPimSnpgGrpSrcTable for which the source type is 'sg'.
numStarGTypes	long	tmnxPimSnpgGenStatsStarGTypes	The value of tmnxPimSnpgGenStatsStarGTypes indicates the number of entries in tmnxPimSnpgGrpSrcTable for which the source type is 'starG'.
SiteSourceGroupRecordPimSnoopingStats MIB table name: TIMETRA-PIM-SNOOPING-MIB.tmnxPimSnpgGrpSrcStatsTable Monitored classes: • vpls.SiteSourceGroupRecord • vpls.SitePimSnooping			

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5620 SAM counter name	Type	MIB counter name	Description
tmnxPimSnpgGrpSrcStatsFwdedOct	long	tmnxPimSnpgGrpSrcStatsFwdedOct	The value of tmnxPimSnpgGrpSrcStatsFwdedOct indicates the number of multicast octets that were forwarded to the interfaces in the outgoing interface list. tmnxPimSnpgGrpSrcIfTable lists all the interfaces in the outgoing interface list.
tmnxPimSnpgGrpSrcStatsFwdedPkts	long	tmnxPimSnpgGrpSrcStatsFwdedPkts	The value of tmnxPimSnpgGrpSrcStatsFwdedPkts indicates the number of multicast packets that were forwarded to the interfaces in the outgoing interface list. tmnxPimSnpgGrpSrcIfTable lists all the interfaces in the outgoing interface list.

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Table H-42 vrrp statistics

5620 SAM counter name	Type	MIB counter name	Description
InstanceAdditionalStats MIB table name: TIMETRA-VRRP-MIB.tmnxVrrpRouterStatsTable Monitored class: vrrp.Instance			
addressListDiscards	long	tmnxVrrpStatsAddressListDiscards	The total number of VRRP advertisement packets discarded because the address list did not match the locally configured list for the virtual router.
advertiseIntervalDiscards	long	tmnxVrrpStatsAdvertiseIntervalDiscards	The total number of VRRP advertisement packets discarded because the advertisement interval in the received packet was different than the one configured for the local virtual router.
advertiseSent	long	tmnxVrrpStatsAdvertiseSent	The total number of VRRP advertisements sent by this virtual router.
masterChanges	long	tmnxVrrpStatsMasterChanges	The value for tmnxVrrpStatsMasterChanges specifies the total number of times the virtual router has seen the master virtual router change.
preemptedEvents	long	tmnxVrrpStatsPreemptedEvents	The value for tmnxVrrpStatsPreemptedEvents specifies the total number of times the virtual router has been preempted by another non-owner master with higher priority.
preemptEvents	long	tmnxVrrpStatsPreemptEvents	The value for tmnxVrrpStatsPreemptEvents specifies the total number of times the virtual router has preempted another non-owner master with lower priority.
totalDiscards	long	tmnxVrrpStatsTotalDiscards	The total number of VRRP advertisement packets discarded for any reason. This includes the packets discarded due to advertise interval mismatch and address list mismatch.

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5620 SAM counter name	Type	MIB counter name	Description
InstanceStats MIB table name: VRRP-MIB.vrrpRouterStatsTable Monitored class: vrrp.Instance			
addressListErrors	long	vrrpStatsAddressListErrors	The total number of packets received for which the address list does not match the locally configured list for the virtual router.
advertiseIntervalErrors	long	vrrpStatsAdvertiseIntervalErrors	The total number of VRRP advertisement packets received for which the advertisement interval is different than the one configured for the local virtual router.
advertiseRcvd	long	vrrpStatsAdvertiseRcvd	The total number of VRRP advertisements received by this virtual router.
authFailures	long	vrrpStatsAuthFailures	The total number of VRRP packets received that do not pass the authentication check.
authTypeMismatch	long	vrrpStatsAuthTypeMismatch	The total number of packets received with 'Auth Type' not equal to the locally configured authentication method (`vrrpOperAuthType').
becomeMaster	long	vrrpStatsBecomeMaster	The total number of times that this virtual router's state has transitioned to MASTER.
invalidAuthType	long	vrrpStatsInvalidAuthType	The total number of packets received with an unknown authentication type.
invalidTypePktsRcvd	long	vrrpStatsInvalidTypePktsRcvd	The number of VRRP packets received by the virtual router with an invalid value in the 'type' field.
ipTtlErrors	long	vrrpStatsIpTtlErrors	The total number of VRRP packets received by the virtual router with IP TTL (Time-To-Live) not equal to 255.
packetLengthErrors	long	vrrpStatsPacketLengthErrors	The total number of packets received with a packet length less than the length of the VRRP header.
priorityZeroPktsRcvd	long	vrrpStatsPriorityZeroPktsRcvd	The total number of VRRP packets received by the virtual router with a priority of '0'.
priorityZeroPktsSent	long	vrrpStatsPriorityZeroPktsSent	The total number of VRRP packets sent by the virtual router with a priority of '0'.
InstanceV6AdditionalStats MIB table name: TIMETRA-VRRP-MIB.tVrrpRtrStatisticsTable Monitored class: vrrp.InstanceV6			
advertiseIntervalDiscards	long	tVrrpStatAdvIntvlDiscards	The value of tVrrpStatAdvIntvlDiscards indicates the total number of VRRP advertisement packets discarded because the advertisement interval in the received packet was different than the one configured for the local virtual router.
advertiseSent	long	tVrrpStatAdvertiseSent	The value of tVrrpStatAdvertiseSent indicates the total number of VRRP advertisements sent by this virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
masterChanges	long	tVrrpStatMasterChanges	The value for tVrrpStatMasterChanges indicates the total number of times the virtual router has seen the master virtual router change.
preemptedEvents	long	tVrrpStatPreemptedEvents	The value for tVrrpStatPreemptedEvents indicates the total number of times the virtual router has been preempted by another non-owner master with higher priority.
preemptEvents	long	tVrrpStatPreemptEvents	The value for tVrrpStatPreemptEvents indicates the total number of times the virtual router has preempted another non-owner master with lower priority.
totalDiscards	long	tVrrpStatTotalDiscards	The value of tVrrpStatTotalDiscards indicates the total number of VRRP advertisement packets discarded for any reason. This includes the packets discarded due to advertise interval mismatch and address list mismatch.
InstanceV6Stats MIB table name: TIMETRA-VRRP-V3-MIB.vrrpRouterStatisticsTable Monitored class: vrrp.InstanceV6			
addressListErrors	long	vrrpStatisticsAddressListErrors	The total number of packets received for which the address list does not match the locally configured list for the virtual router. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.
advertiseIntervalErrors	long	vrrpStatisticsAdvIntervalErrors	The total number of VRRP advertisement packets received for which the advertisement interval is different than the one configured for the local virtual router. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.
advertiseRcvd	long	vrrpStatisticsRcvdAdvertisements	The total number of VRRP advertisements received by this virtual router. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.
becomeMaster	long	vrrpStatisticsMasterTransitions	The total number of times that this virtual router's state has transitioned to MASTER. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.
invalidAuthType	long	vrrpStatisticsRcvdInvalidAuthentications	The total number of packets received with an unknown authentication type. REFERENCE RFC3768 Section 5.3.6.

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5620 SAM counter name	Type	MIB counter name	Description
invalidTypePktsRcvd	long	vrrpStatisticsRcvdInvalidTypePkts	The number of VRRP packets received by the virtual router with an invalid value in the 'type' field. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.
ipTtlErrors	long	vrrpStatisticsIpTtlErrors	The total number of VRRP packets received by the Virtual router with IPv4 TTL (for VRRP over IPv4) or IPv6 Hop Limit (for VRRP over IPv6) not equal to 255. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime. REFERENCE RFC3768 Section 5.2.3.
packetLengthErrors	long	vrrpStatisticsPacketLengthErrors	The total number of packets received with a packet length less than the length of the VRRP header. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.
priorityZeroPktsRcvd	long	vrrpStatisticsRcvdPriZeroPackets	The total number of VRRP packets received by the virtual router with a priority of '0'. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime. REFERENCE RFC3768 Section 5.3.4.
priorityZeroPktsSent	long	vrrpStatisticsSentPriZeroPackets	The total number of VRRP packets sent by the virtual router with a priority of '0'. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime. REFERENCE RFC3768 Section 5.3.4.

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I. 7750 SR Release 7.0 statistics counters

I.1 7750 SR Release 7.0 statistics counters *I-2*

I.1 7750 SR Release 7.0 statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for the 7750 SR, Release 7.0. Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.



Note 1 — The tables list the 5620 SAM-supported statistics counters for the current release of the device. Counters that are supported for a previous device release, but not for the current release, are not listed.

Note 2 — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table I-1 lists each statistics package and the associated statistics-counter table.

Table I-1 Statistics packages and counter tables

Package name	See
aapolicy	Table I-2
aclfilter	Table I-3
aps	Table I-4
atm	Table I-5
bgp	Table I-6
bundle	Table I-7
dhcp	Table I-8
equipment	Table I-9
ethernetequipment	Table I-10
fr	Table I-11
gsmp	Table I-12
igmp	Table I-13
ipsec	Table I-14
isa	Table I-15
isis	Table I-16
l2fib	Table I-17
l2fwd	Table I-18

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Package name	See
lag	Table I-19
ldp	Table I-20
lldp	Table I-21
mld	Table I-22
mpls	Table I-23
msdp	Table I-24
multicast	Table I-25
multichassis	Table I-26
ospf	Table I-27
pae802_1x	Table I-28
pim	Table I-29
ppp	Table I-30
radiusaccounting	Table I-31
ressubscr	Table I-32
rip	Table I-33
rsvp	Table I-34
rtr	Table I-35
service	Table I-36
sitesec	Table I-37
sonetequipment	Table I-38
srrp	Table I-39
subscrauth	Table I-40
svq	Table I-41
svt	Table I-42
tdmequipment	Table I-43
vpls	Table I-44
vrrp	Table I-45

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Table I-2 aapolicy statistics

5620 SAM counter name	Type	MIB counter name	Description
BsxAaAccountingStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaTable Monitored classes: • aapolicy.Application • aapolicy.ApplicationGroup • aapolicy.ApplicationAssuranceProtocol			

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5620 SAM counter name	Type	MIB counter name	Description
numOfSubscribers	long	tmnxBsxStatAaNumSubscribers	The value of tmnxBsxStatAaNumSubscribers indicates the number of subscribers at the most recent 5-minute snapshot of statistics.
BsxAppGrpStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaTable Monitored class: aapolicy.ApplicationGroup			
aaName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxAppQosPolicyStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxAqpStatsTable Monitored class: aapolicy.AppQosPolicy			
conflicts	long	tmnxBsxAqpStatsConflicts	The value of tmnxBsxAqpStatsConflicts indicates the number of flows that have hit this AQP entry, but resulted in a conflict with the match criteria.
flows	long	tmnxBsxAqpStatsFlows	The value of tmnxBsxAqpStatsFlows indicates the number of flows that have hit this entry. In certain cases, a flow may change its attributes thus undergoing a second policy evaluation. In these cases, the flow may be counted against two different AQP entries.
BsxAppStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaTable Monitored class: aapolicy.Application			
aaName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxProtStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaTable Monitored class: aapolicy.ApplicationAssuranceProtocol			
aaName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxSapCustRecAppGrpStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubTable Monitored class: service.AccessInterface			

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5620 SAM counter name	Type	MIB counter name	Description
appGrpName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxSapCustRecAppStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubTable Monitored class: service.AccessInterface			
appName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxSapCustRecProtStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubTable Monitored class: service.AccessInterface			
protName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxSapStudyAppStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubSdyTable Monitored class: service.AccessInterface			
appName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxSapStudyProtStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubSdyTable Monitored class: service.AccessInterface			
protName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.

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Table I-3 aclfilter statistics

5620 SAM counter name	Type	MIB counter name	Description
HitCountStats MIB table name: TIMETRA-FILTER-MIB.tIPFilterParamsTable Monitored class: aclfilter.IpFilterEntry			

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5620 SAM counter name	Type	MIB counter name	Description
egressHitByteCount	UINT128	tIPFilterParamsEgrHitByteCount	The value of tIPFilterParamsEgrHitByteCount indicates the number of bytes of all egress packets that matched this entry.
egressHitCount	UINT128	tIPFilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitByteCount	UINT128	tIPFilterParamsIngrHitByteCount	The value of tIPFilterParamsIngrHitByteCount indicates the number of bytes of all ingress packets that matched this entry.
ingressHitCount	UINT128	tIPFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.
Ipv6HitCountStats MIB table name: TIMETRA-FILTER-MIB.tIPv6FilterParamsTable Monitored class: aclfilter.Ipv6FilterEntry			
egressHitByteCount	UINT128	tIPv6FilterParamsEgrHitByteCount	This tIPv6FilterParamsEgrHitByteCount indicates the number of bytes of all egress packets that matched this entry.
egressHitCount	UINT128	tIPv6FilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitByteCount	UINT128	tIPv6FilterParamsIngrHitByteCount	The value of tIPv6FilterParamsIngrHitByteCount indicates the number of bytes of all ingress packets that matched this entry.
ingressHitCount	UINT128	tIPv6FilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.
MacHitCountStats MIB table name: TIMETRA-FILTER-MIB.tMacFilterParamsTable Monitored class: aclfilter.MacFilterEntry			
egressHitByteCount	UINT128	tMacFilterParamsEgrHitByteCount	The value of tMacFilterParamsEgrHitByteCount indicates the number of bytes of all egress packets that matched this entry.
egressHitCount	UINT128	tMacFilterParamsEgressHitCount	This object indicates the number of times an egress packet matched this entry.
ingressHitByteCount	UINT128	tMacFilterParamsIngrHitByteCount	The value of tMacFilterParamsIngrHitByteCount indicates the number of bytes of all ingress packets that matched this entry.
ingressHitCount	UINT128	tMacFilterParamsIngressHitCount	This object indicates the number of times an ingress packet matched this entry.

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Table I-4 aps statistics

5620 SAM counter name	Type	MIB counter name	Description
ApsChannelStats MIB table name: APS-MIB.apsChanStatusTable Monitored class: aps.ApsChannel			

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5620 SAM counter name	Type	MIB counter name	Description
discontinuityTime	long	apsChanStatusDiscontinuityTime	The value of sysUpTime on the most recent occasion at which any one or more of this channel's counters suffered a discontinuity. The relevant counters are the specific instances associated with this channel of any Counter32 object contained in apsChanStatusTable. If no such discontinuities have occurred since the last re-initialization of the local management subsystem, then this object contains a zero value.
lastSwitchover	long	apsChanStatusLastSwitchover	When queried with index value apsChanConfigNumber other than 0, this object will return the value of sysUpTime when this channel last completed a switch to the protection line. If this channel has never switched to the protection line, the value 0 will be returned. When queried with index value apsChanConfigNumber set to 0, which is the protection line, this object will return the value of sysUpTime the last time that a working channel was switched back to the working line from this protection line. If no working channel has ever switched back to the working line from this protection line, the value 0 will be returned.
signalDegrades	long	apsChanStatusSignalDegrades	A count of Signal Degrade conditions. This condition occurs when the line Bit Error Rate exceeds the currently configured value of the relevant instance of apsConfigSdBerThreshold. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime.
signalFailures	long	apsChanStatusSignalFailures	A count of Signal Failure conditions that have been detected on the incoming signal. This condition occurs when a loss of signal, loss of frame, AIS-L or a Line bit error rate exceeding the currently configured value of the relevant instance of apsConfigSfBerThreshold. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
switchovers	long	apsChanStatusSwitchovers	When queried with index value apsChanConfigNumber other than 0, this object will return the number of times this channel has switched to the protection line. When queried with index value apsChanConfigNumber set to 0, which is the protection line, this object will return the number of times that any working channel has been switched back to the working line from this protection line. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime.
switchoverSeconds	long	apsChanStatusSwitchoverSeconds	The cumulative Protection Switching Duration (PSD) time in seconds. For a working channel, this is the cumulative number of seconds that service was carried on the protection line. For the protection line, this is the cumulative number of seconds that the protection line has been used to carry any working channel traffic. This information is only valid if revertive switching is enabled. The value 0 will be returned otherwise. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsChanStatusDiscontinuityTime. For example, if the value of an instance of apsChanStatusSwitchoverSeconds changes from a non-zero value to zero due to revertive switching being disabled, it is expected that the corresponding value of apsChanStatusDiscontinuityTime will be updated to reflect the time of the configuration change.
ApsGroupStats MIB table name: APS-MIB.apsStatusTable Monitored class: aps.ApsGroup			
channelMismatches	long	apsStatusChannelMismatches	A count of Channel Mismatch conditions. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.
discontinuityTime	long	apsStatusDiscontinuityTime	The value of sysUpTime on the most recent occasion at which any one or more of this APS group's counters suffered a discontinuity. The relevant counters are the specific instances associated with this APS group of any Counter32 object contained in apsStatusTable. If no such discontinuities have occurred since the last re-initialization of the local management subsystem, then this object contains a zero value.

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5620 SAM counter name	Type	MIB counter name	Description
fEPLFs	long	apsStatusFEPLFs	A count of Far-End Protection-Line Failure conditions. This condition is declared based on receiving SF on the protection line in the K1 byte. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.
modeMismatches	long	apsStatusModeMismatches	A count of Mode Mismatch conditions. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.
pSBFs	long	apsStatusPSBFs	A count of Protection Switch Byte Failure conditions. This condition occurs when either an inconsistent APS byte or an invalid code is detected. An inconsistent APS byte occurs when no three consecutive K1 bytes of the last 12 successive frames are identical, starting with the last frame containing a previously consistent byte. An invalid code occurs when the incoming K1 byte contains an unused code or a code irrelevant for the specific switching operation (e.g., Reverse Request while no switching request is outstanding) in three consecutive frames. An invalid code also occurs when the incoming K1 byte contains an invalid channel number in three consecutive frames. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of apsStatusDiscontinuityTime.

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Table I-5 atm statistics

5620 SAM counter name	Type	MIB counter name	Description
AtmIfcStatistics MIB table name: TIMETRA-ATM-MIB.tAtmIfcStatisticsTable Monitored class: atm.IfConnection			
tAtmIfcStatsDrpCellsRxd	long	tAtmIfcStatsDrpCellsRxd	The value of tAtmIfcStatsDrpCellsRxd indicates the number of all policer cells discards (CLP=0+1) of the IFC. This excludes any buffer management discards (if applicable).
tAtmIfcStatsDrpClp0CellsRxd	long	tAtmIfcStatsDrpClp0CellsRxd	The value of tAtmIfcStatsDrpClp0CellsRxd indicates the number of all policer CLP=0 cells discards of the IFC. This excludes any buffer management discards (if applicable).

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5620 SAM counter name	Type	MIB counter name	Description
tAtmIfcStatsDrpClp0CellsTxd	long	tAtmIfcStatsDrpClp0CellsTxd	The value of tAtmIfcStatsDrpClp0CellsTxd indicates the number of all CLP=0 cells discards of this IFC. This includes both discards due to buffer management and policer.
tAtmIfcStatsTagCells	long	tAtmIfcStatsTagCells	The value of tAtmIfcStatsTagCells indicates the number of tagged CLP=0 cells of the IFC. The egress may or may not discard these cells.
tAtmIfcStatsTotalBytesRxd	UINT128	tAtmIfcStatsTotalBytesTxd	The value of tAtmIfcStatsTotalBytesTxd indicates the number of bytes transmitted by this IFC. This is the number of tAtmIfcStatsTotalCellsTxd multiplied by 53.
tAtmIfcStatsTotalBytesTxd	UINT128	tAtmIfcStatsTotalBytesRxd	The value of tAtmIfcStatsTotalBytesRxd indicates the number of bytes received by this IFC. This is the number of tAtmIfcStatsTotalCellsRxd multiplied by 53.
tAtmIfcStatsTotalCellsRxd	UINT128	tAtmIfcStatsTotalCellsRxd	The value of tAtmIfcStatsTotalCellsRxd indicates the number of valid ATM cells received by the IFC including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmIfcStatsTotalCellsTxd	UINT128	tAtmIfcStatsTotalCellsTxd	The value of tAtmIfcStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the IFC including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmIfcStatsTotalClp0CellsRxd	UINT128	tAtmIfcStatsTotalClp0CellsRxd	The value of tAtmIfcStatsTotalClp0CellsRxd indicates the number of valid ATM CLP=0 cells received by the IFC. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmIfcStatsTotalClp0CellsTxd	UINT128	tAtmIfcStatsTotalClp0CellsTxd	The value of tAtmIfcStatsTotalClp0CellsTxd indicates the number of valid ATM CLP=0 cells transmitted by the IFC. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
AtmOamVplStatistics MIB table name: TIMETRA-ATM-MIB.tAtmOamVplStatisticsTable Monitored class: atm.VPConnection			
tAtmOamVplStatsAISCellsRxd	long	tAtmOamVplStatsAISCellsRxd	The value of tAtmOamVplStatsAISCellsRxd indicates the number of AIS cells received on this VPL for both end to end and segment.
tAtmOamVplStatsAISCellsTxd	long	tAtmOamVplStatsAISCellsTxd	The value of tAtmOamVplStatsAISCellsTxd indicates the number of AIS cells transmitted on this VPL for both end to end and segment.

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5620 SAM counter name	Type	MIB counter name	Description
tAtmOamVplStatsCrc10Errors	long	tAtmOamVplStatsCrc10Errors	The value of tAtmOamVplStatsCrc10Errors indicates the number of OAM cells discarded on this VPL with CRC 10 errors.
tAtmOamVplStatsLoopbackCellsRxd	long	tAtmOamVplStatsLoopbackCellsRxd	The value of tAtmOamVplStatsLoopbackCellsRxd indicates the number of loopback requests and responses received on this VPL for both end to end and segment.
tAtmOamVplStatsLoopbackCellsTxd	long	tAtmOamVplStatsLoopbackCellsTxd	The value of tAtmOamVplStatsLoopbackCellsTxd indicates the number of loopback requests and responses transmitted on this VPL for both end to end and segment.
tAtmOamVplStatsOtherCellsRxd	long	tAtmOamVplStatsOtherCellsRxd	This value of tAtmOamVplStatsOtherCellsRxd indicates the number of OAM cells that are received on this VPL but not identified.
tAtmOamVplStatsRDICellsRxd	long	tAtmOamVplStatsRDICellsRxd	The value of tAtmOamVplStatsRDICellsRxd indicates the number of RDI cells received on this VPL for both end to end and segment.
tAtmOamVplStatsRDICellsTxd	long	tAtmOamVplStatsRDICellsTxd	The value of tAtmOamVplStatsRDICellsTxd indicates the number of RDI cells transmitted on this VPL for both end to end and segment.
AtmVplStatistics MIB table name: TIMETRA-ATM-MIB.tAtmVplStatisticsTable Monitored class: atm.VPConnection			
tAtmVplStatsDrpCellsRxd	long	tAtmVplStatsDrpCellsRxd	The value of tAtmVplStatsDrpCellsRxd indicates the number of all policer cells discards (CLP=0+1) of the VPL. This excludes any buffer management discards (if applicable).
tAtmVplStatsDrpClp0CellsRxd	long	tAtmVplStatsDrpClp0CellsRxd	The value of tAtmVplStatsDrpClp0CellsRxd indicates the number of all policer CLP=0 cells discards of the VPL. This excludes any buffer management discards (if applicable).
tAtmVplStatsDrpClp0CellsTxd	long	tAtmVplStatsDrpClp0CellsTxd	The value of tAtmVplStatsDrpClp0CellsTxd indicates the number of all CLP=0 cells discards of this VPL. This includes both discards due to buffer management and policer.
tAtmVplStatsTagCells	long	tAtmVplStatsTagCells	The value of tAtmVplStatsTagCells indicates the number of tagged CLP=0 cells of the VPL. The egress may or may not discard these cells.
tAtmVplStatsTotalBytesRxd	UINT128	tAtmVplStatsTotalBytesRxd	The value of tAtmVplStatsTotalBytesRxd indicates the number of bytes received by this VPL. This is the number of tAtmVplStatsTotalCellsRxd multiplied by 53.

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5620 SAM counter name	Type	MIB counter name	Description
tAtmVplStatsTotalBytesTxd	UINT128	tAtmVplStatsTotalBytesTxd	The value of tAtmVplStatsTotalBytesTxd indicates the number of bytes transmitted by this VPL. This is the number of tAtmVplStatsTotalCellsTxd multiplied by 53.
tAtmVplStatsTotalCellsRxd	UINT128	tAtmVplStatsTotalCellsRxd	The value of tAtmVplStatsTotalCellsRxd indicates the number of valid ATM cells received by the VPL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVplStatsTotalCellsTxd	UINT128	tAtmVplStatsTotalCellsTxd	The value of tAtmVplStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the VPL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVplStatsTotalClp0CellsRxd	UINT128	tAtmVplStatsTotalClp0CellsRxd	The value of tAtmVplStatsTotalClp0CellsRxd indicates the number of valid ATM CLP=0 cells received by the VPL. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVplStatsTotalClp0CellsTxd	UINT128	tAtmVplStatsTotalClp0CellsTxd	The value of tAtmVplStatsTotalClp0CellsTxd indicates the number of valid ATM CLP=0 cells transmitted by the VPL. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
AtmVtlStatistics MIB table name: TIMETRA-ATM-MIB.tAtmVtlStatisticsTable Monitored class: atm.VTConnection			
tAtmVtlStatsDrpCellsRxd	long	tAtmVtlStatsDrpCellsRxd	The value of tAtmVtlStatsDrpCellsRxd indicates the number of all policer cells discards (CLP=0+1) of the VTL. This excludes any buffer management discards (if applicable).
tAtmVtlStatsDrpClp0CellsRxd	long	tAtmVtlStatsDrpClp0CellsRxd	The value of tAtmVtlStatsDrpClp0CellsRxd indicates the number of all policer CLP=0 cells discards of the VTL. This excludes any buffer management discards (if applicable).
tAtmVtlStatsDrpClp0CellsTxd	long	tAtmVtlStatsDrpClp0CellsTxd	The value of tAtmVtlStatsDrpClp0CellsTxd indicates the number of all CLP=0 cells discards of this VTL. This includes both discards due to buffer management and policer.
tAtmVtlStatsTagCells	long	tAtmVtlStatsTagCells	The value of tAtmVtlStatsTagCells indicates the number of tagged CLP=0 cells of the VTL. The egress may or may not discard these cells.
tAtmVtlStatsTotalBytesRxd	UINT128	tAtmVtlStatsTotalBytesTxd	The value of tAtmVtlStatsTotalBytesTxd indicates the number of bytes transmitted by this VTL. This is the number of tAtmVtlStatsTotalCellsTxd multiplied by 53.

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5620 SAM counter name	Type	MIB counter name	Description
tAtmVtlStatsTotalBytesTxd	UINT128	tAtmVtlStatsTotalBytesRxd	The value of tAtmVtlStatsTotalBytesRxd indicates the number of bytes received by this VTL. This is the number of tAtmVtlStatsTotalCellsRxd multiplied by 53.
tAtmVtlStatsTotalCellsRxd	UINT128	tAtmVtlStatsTotalCellsRxd	The value of tAtmVtlStatsTotalCellsRxd indicates the number of valid ATM cells received by the VTL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVtlStatsTotalCellsTxd	UINT128	tAtmVtlStatsTotalCellsTxd	The value of tAtmVtlStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the VTL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVtlStatsTotalClp0CellsRxd	UINT128	tAtmVtlStatsTotalClp0CellsRxd	The value of tAtmVtlStatsTotalClp0CellsRxd indicates the number of valid ATM CLP=0 cells received by the VTL. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmVtlStatsTotalClp0CellsTxd	UINT128	tAtmVtlStatsTotalClp0CellsTxd	The value of tAtmVtlStatsTotalClp0CellsTxd indicates the number of valid ATM CLP=0 cells transmitted by the VTL. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
IlmiStatistics MIB table name: TIMETRA-ATM-MIB.tAtmIlmiLinkStatisticsTable Monitored class: atm.IlmiLink			
inBadValueErrors	long	tAtmIlmiLinkInBadValueErrors	The value of tAtmIlmiLinkInBadValueErrors indicates the total number SNMP `BadValue' error messages received on this ILMI link.
inGeneralErrors	long	tAtmIlmiLinkInGeneralErrors	The value of tAtmIlmiLinkInGeneralErrors indicates the total number SNMP `General' error messages received on this ILMI link.
inGetNextRequest	long	tAtmIlmiLinkInGetNextRequestPdus	The value of tAtmIlmiLinkInGetNextRequestPdus indicates the total number 'GetNextRequest' SNMP PDUs received on this ILMI link.
inGetRequest	long	tAtmIlmiLinkInGetRequestPdus	The value of tAtmIlmiLinkInGetRequestPdus indicates the total number GetRequest SNMP PDUs received on this ILMI link.
inGetResponse	long	tAtmIlmiLinkInGetResponsePdus	The value of tAtmIlmiLinkInGetResponsePdus indicates the total number 'GetResponse' SNMP PDUs received on this ILMI link in response to 'GetRequest', 'GetNextRequest' and 'SetRequests' sent.

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5620 SAM counter name	Type	MIB counter name	Description
inNoSuchNameErrors	long	tAtmIlmiLinkInNoSuchNameErrors	The value of tAtmIlmiLinkInNoSuchNameErrors indicates the total number SNMP `NoSuchName' error messages received on this ILMI link.
inPdu	long	tAtmIlmiLinkInPdus	The value of tAtmIlmiLinkInPdus indicates the total number SNMP PDUs received on this ILMI link.
inReadOnlyErrors	long	tAtmIlmiLinkInReadOnlyErrors	The value of tAtmIlmiLinkInReadOnlyErrors indicates the total number SNMP `ReadOnly' error messages received on this ILMI link.
inSetRequestPackets	long	tAtmIlmiLinkInSetRequestPdus	The value of tAtmIlmiLinkInSetRequestPdus indicates the total number 'SetRequest' SNMP PDUs received on this ILMI link.
inTooBigErrors	long	tAtmIlmiLinkInTooBigErrors	The value of tAtmIlmiLinkInTooBigErrors indicates the total number SNMP `TooBig' error messages received on this ILMI link.
inTraps	long	tAtmIlmiLinkInTrapPdus	The value of tAtmIlmiLinkInTrapPdus indicates the total number Trap SNMP PDUs received on this ILMI link.
outBadValueErrors	long	tAtmIlmiLinkOutBadValueErrors	The value of tAtmIlmiLinkOutBadValueErrors indicates the total number SNMP `BadValue' error messages sent on this ILMI link.
outGeneralErrors	long	tAtmIlmiLinkOutGeneralErrors	The value of tAtmIlmiLinkOutGeneralErrors indicates the total number SNMP `General' error messages sent on this ILMI link.
outGetNextRequest	long	tAtmIlmiLinkOutGetNextRequestPdus	The value of tAtmIlmiLinkOutGetNextRequestPdus indicates the total number GetNextRequest SNMP PDUs sent on this ILMI link.
outGetRequest	long	tAtmIlmiLinkOutGetRequestPdus	The value of tAtmIlmiLinkOutGetRequestPdus indicates the total number GetRequest SNMP PDUs sent on this ILMI link.
outGetResponse	long	tAtmIlmiLinkOutGetResponsePdus	The value of tAtmIlmiLinkOutGetResponsePdus indicates the total number GetResponse SNMP PDUs sent on this ILMI link in response to GetRequest, GetNextRequest and 'SetRequests' received.
outNoSuchNameErrors	long	tAtmIlmiLinkOutNoSuchNameErrors	The value of tAtmIlmiLinkOutNoSuchNameErrors indicates the total number SNMP `NoSuchName' error messages sent on this ILMI link.
outPdu	long	tAtmIlmiLinkOutPdus	The value of tAtmIlmiLinkOutPdus indicates the total number SNMP PDUs sent on this ILMI link.

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5620 SAM counter name	Type	MIB counter name	Description
outReadOnlyErrors	long	tAtmIlmiLinkOutReadOnlyErrors	The value of tAtmIlmiLinkOutReadOnlyErrors indicates the total number SNMP `ReadOnly' error messages sent on this ILMI link.
outSetRequestPackets	long	tAtmIlmiLinkOutSetRequestPdus	The value of tAtmIlmiLinkOutSetRequestPdus indicates the total number 'SetRequest' SNMP PDUs sent on this ILMI link.
outTooBigErrors	long	tAtmIlmiLinkOutTooBigErrors	The value of tAtmIlmiLinkOutTooBigErrors indicates the total number SNMP `TooBig' error messages sent on this ILMI link.
outTraps	long	tAtmIlmiLinkOutTrapPdus	The value of tAtmIlmiLinkOutTrapPdus indicates the total number Trap SNMP PDUs sent on this ILMI link.
snmpCommStringErrors	long	tAtmIlmiLinkInInvalidSnmpCommunityStringPdus	The value of tAtmIlmiLinkInInvalidSnmpCommunityStringPdus indicates the total number SNMP PDUs received with invalid community string on this ILMI link.
snmpFormatErrors	long	tAtmIlmiLinkInInvalidSnmpFormatPdus	The value of tAtmIlmiLinkInInvalidSnmpFormatPdus indicates the total number SNMP PDUs received with invalid ASN.1 format on this ILMI link.
snmpVersionErrors	long	tAtmIlmiLinkInInvalidSnmpVersionPdus	The value of tAtmIlmiLinkInInvalidSnmpVersionPdus indicates the total number SNMP PDUs received with invalid version on this ILMI link.
InterfaceAal5Stats MIB table name: TIMETRA-ATM-MIB.tAtmIntfAal5StatsTable Monitored class: atm.Interface			
tAtmInterfaceAal5StatsTotalCrc32Errors	UINT128	tAtmIntfAal5StatsTotalCrc32Err	The value of tAtmIntfAal5StatsTotalCrc32Err indicates the number of Errors detected by the 32 bit cyclic redundancy check.
tAtmInterfaceAal5StatsTotalPktsDroppedRxd	UINT128	tAtmIntfAal5StatsTotalPktsDrpRxd	The value of tAtmIntfAal5StatsTotalPktsDrpRxd indicates the number of AAL5 PDUs dropped by the ATM interface in the receive direction. This count does not include crc32 Errors or oversized SDU discards.
tAtmInterfaceAal5StatsTotalPktsDroppedTxd	UINT128	tAtmIntfAal5StatsTotalPktsDrpTxd	The value of tAtmIntfAal5StatsTotalPktsDrpTxd indicates the number of AAL5 PDUs dropped in the transmit direction. This count does not include crc32 Errors or oversized SDU discards.
tAtmInterfaceAal5StatsTotalPktsRxd	UINT128	tAtmIntfAal5StatsTotalPktsRxd	The value of tAtmIntfAal5StatsTotalPktsRxd indicates the number of AAL5 PDUs that are received by the ATM interface.

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5620 SAM counter name	Type	MIB counter name	Description
tAtmInterfaceAal5StatsTotalPktsTxd	UINT128	tAtmIntfAal5StatsTotalPktsTxd	The value of tAtmIntfAal5StatsTotalPktsTxd indicates the number of AAL5 PDUs that are transmitted by the ATM interface.
InterfaceStats MIB table name: TIMETRA-ATM-MIB.tAtmIntfStatsTable Monitored class: atm.Interface			
tAtmInterfaceStatsTotalBytesRxd	UINT128	tAtmIntfStatsTotalBytesRxd	The value of tAtmIntfStatsTotalBytesRxd indicates the number of bytes received on this interface. This is the number of tAtmIntfStatsTotalCellsRxd multiplied by 53.
tAtmInterfaceStatsTotalBytesTxd	UINT128	tAtmIntfStatsTotalBytesTxd	The value of tAtmIntfStatsTotalBytesTxd indicates the number of bytes transmitted on this interface. This is the number of tAtmIntfStatsTotalCellsTxd multiplied by 53.
tAtmInterfaceStatsTotalCellsRxd	UINT128	tAtmIntfStatsTotalCellsRxd	The value of tAtmIntfStatsTotalCellsRxd indicates the number of valid ATM cells received by the ATM interface including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
tAtmInterfaceStatsTotalCellsTxd	UINT128	tAtmIntfStatsTotalCellsTxd	The value of tAtmIntfStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the ATM interface including both CLP=0 and CLP=1 cells.
tAtmInterfaceStatsTotalUnknownCellsDropped	long	tAtmIntfStatsTotalUnknCellsDrp	The value of tAtmIntfStatsTotalUnknCellsDrp indicates the number of cells dropped due to an unknown VPI/VCI.
PvcConnectionAal5PerformanceStats MIB table name: ATM-MIB.aal5VccTable Monitored class: atm.PvcConnection			
aal5CrcErrors	long	aal5VccCrcErrors	The number of AAL5 CPCS PDUs received with CRC-32 errors on this AAL5 VCC at the interface associated with an AAL5 entity.
aal5OverSizedSDUs	long	aal5VccOverSizedSDUs	The number of AAL5 CPCS PDUs discarded on this AAL5 VCC at the interface associated with an AAL5 entity because the AAL5 SDUs were too large.
aal5SarTimeOuts	long	aal5VccSarTimeOuts	The number of partially re-assembled AAL5 CPCS PDUs which were discarded on this AAL5 VCC at the interface associated with an AAL5 entity because they were not fully re-assembled within the required time period. If the re-assembly timer is not supported, then this object contains a zero value.
PvcConnectionAal5Stats MIB table name: TIMETRA-ATM-MIB.tAal5VccStatisticsTable Monitored class: atm.PvcConnection			

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5620 SAM counter name	Type	MIB counter name	Description
aal5DroppedPacketsRxd	UINT128	tAal5VccStatsDrpPacketsRxd	The value of tAal5VccStatsDrpPacketsRxd indicates the number of dropped AAL-5 SDUs that have been received on the AAL-5 VCC.
aal5DroppedPacketsTxd	UINT128	tAal5VccStatsDrpPacketsTxd	The value of tAal5VccStatsDrpPacketsTxd indicates the number of dropped AAL-5 SDUs that would have been transmitted on the AAL-5 VCC.
aal5PacketsRxd	UINT128	tAal5VccStatsPacketsRxd	The value of tAal5VccStatsPacketsRxd indicates the number of valid AAL-5 SDUs and AAL-5 SDUs with CRC-32 errors received by the AAL-5 VCC.
aal5PacketsTxd	UINT128	tAal5VccStatsPacketsTxd	The value of tAal5VccStatsPacketsTxd indicates the number of AAL-5 SDUs transmitted by the AAL-5 VCC.
PvcConnectionOamStats MIB table name: TIMETRA-ATM-MIB.tAtmOamVclStatisticsTable Monitored class: atm.PvcConnection			
oamAISCellsRxd	long	tAtmOamVclStatsAISCellsRxd	The value of tAtmOamVclStatsAISCellsRxd indicates the number of AIS cells received on this VC for both end to end and segment.
oamAISCellsTxd	long	tAtmOamVclStatsAISCellsTxd	The value of tAtmOamVclStatsAISCellsTxd indicates the number of AIS cells transmitted on this VC for both end to end and segment.
oamCrc10Errors	long	tAtmOamVclStatsCrc10Err	The value of tAtmOamVclStatsCrc10Err indicates the number of oam cells discarded with CRC 10 Errors.
oamLoopbackCellsRxd	long	tAtmOamVclStatsLoopbackCellsRxd	The value of tAtmOamVclStatsLoopbackCellsRxd indicates the number of loopback requests and responses received on this VC for both end to end and segment.
oamLoopbackCellsTxd	long	tAtmOamVclStatsLoopbackCellsTxd	The value of tAtmOamVclStatsLoopbackCellsTxd indicates the number of loopback requests and responses transmitted on this VC for both end to end and segment.
oamOtherCellsRxd	long	tAtmOamVclStatsOtherCellsRxd	This value of tAtmOamVclStatsOtherCellsRxd indicates the number of oam cells that are received but not identified.
oamRDICellsRxd	long	tAtmOamVclStatsRDICellsRxd	The value of tAtmOamVclStatsRDICellsRxd indicates the number of RDI cells received on this VC for both end to end and segment.
oamRDICellsTxd	long	tAtmOamVclStatsRDICellsTxd	The value of tAtmOamVclStatsRDICellsTxd indicates the number of RDI cells transmitted on this VC for both end to end and segment.

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5620 SAM counter name	Type	MIB counter name	Description
PvcConnectionStats MIB table name: TIMETRA-ATM-MIB.tAtmVclStatisticsTable Monitored class: atm.PvcConnection			
totalBytesRxd	UINT128	tAtmVclStatsTotalBytesRxd	The value of tAtmVclStatsTotalBytesRxd indicates the number of bytes received by this Vcl. This is the number of tAtmVclStatsTotalCellsRxd multiplied by 53.
totalBytesTxd	UINT128	tAtmVclStatsTotalBytesTxd	The value of tAtmVclStatsTotalBytesTxd indicates the number of bytes transmitted by this Vcl. This is the number of tAtmVclStatsTotalCellsTxd multiplied by 53.
totalPacketsRxd	UINT128	tAtmVclStatsTotalCellsRxd	The value of tAtmVclStatsTotalCellsRxd indicates the number of valid ATM cells received by the VCL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
totalPacketsTxd	UINT128	tAtmVclStatsTotalCellsTxd	The value of tAtmVclStatsTotalCellsTxd indicates the number of valid ATM cells transmitted by the VCL including both CLP=0 and CLP=1 cells. If traffic policing is implemented, then cells are counted prior to the application of traffic policing.
TCStats MIB table name: ATM-MIB.atmInterfaceTCTable Monitored class: atm.Interface			
ocdEvents	long	atmInterfaceOCDEvents	The number of times the Out of Cell Delineation (OCD) events occur. If seven consecutive ATM cells have Header Error Control (HEC) violations, an OCD event occurs. A high number of OCD events may indicate a problem with the TC Sublayer.
TCSubLayerStats MIB table name: TIMETRA-ATM-MIB.tAtmTCSublayerTable Monitored class: atm.Interface			
hecErrors	long	tAtmTCSublayerHecErrors	The value of tAtmTCSublayerHecErrors indicates the number of cells with uncorrectable HEC Errors on this interface.
hecErrorsFixed	long	tAtmTCSublayerHecErrorsFixed	The value of tAtmTCSublayerHecErrorsFixed indicates the number of cells with correctable HEC Errors on this interface.

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Table I-6 bgp statistics

5620 SAM counter name	Type	MIB counter name	Description
PeerAdditionalStats MIB table name: BGP4-MIB.bgpPeerTable Monitored class: bgp.Peer			
fsmEstablishedTime	long	bgpPeerFsmEstablishedTime	This timer indicates how long (in seconds) this peer has been in the Established state or how long since this peer was last in the Established state. It is set to zero when a new peer is configured or the router is booted.
PeerStats MIB table name: TIMETRA-BGP-MIB.tBgpPeerNgOperTable Monitored class: bgp.Peer			
flaps	long	tBgpPeerNgOperFlaps	tBgpPeerNgOperFlaps indicates the number of flaps of updates from this peer.
inputQueueMessages	long	tBgpPeerNgOperInputQueueMsgs	tBgpPeerNgOperInputQueueMsgs indicates the number of unprocessed messages in the queue, from this peer.
lastEvent	long	tBgpPeerNgOperLastEvent	tBgpPeerNgOperLastEvent indicates the last BGP event of this peer.
lastRestartTime	long	tBgpPeerNgOperLastRestartTime	tBgpPeerNgOperLastRestartTime indicates the last time the peer attempted restart.
lastState	long	tBgpPeerNgOperLastState	tBgpPeerNgOperLastState indicates the last BGP state of this peer.
mcastActivePrefixes	long	tBgpPeerNgOperMCastV4ActivePfxs	The value of tBgpPeerNgOperMCastV4ActivePfxs indicates the number of active IPv4 multicast prefixes from this peer.
mcastPrefixesSuppressedByDamping	long	tBgpPeerNgOperMCastV4SuppPfxDamp	The value of tBgpPeerNgOperMCastV4SuppPfxDamp indicates the number of IPv4 multicast prefixes from this peer, which have been suppressed by damping.
mcastReceivedPrefixes	long	tBgpPeerNgOperMCastV4RecvPfxs	The value of tBgpPeerNgOperMCastV4RecvPfxs indicates the number of IPv4 multicast prefixes received from this peer.
mcastSentPrefixes	long	tBgpPeerNgOperMCastV4SentPfxs	The value of tBgpPeerNgOperMCastV4SentPfxs indicates the number of IPv4 multicast prefixes transmitted to this peer.
messageOctetsReceived	UINT128	tBgpPeerNgOperMsgOctetsRcvd	tBgpPeerNgOperMsgOctetsRcvd indicates the number of octets received from this peer.
messageOctetsSent	UINT128	tBgpPeerNgOperMsgOctetsSent	tBgpPeerNgOperMsgOctetsSent indicates the number of octets transmitted to this peer.
numberOfRestarts	long	tBgpPeerNgOperNumRestarts	tBgpPeerNgOperNumRestarts indicates the number of times the peer has attempted restart.

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5620 SAM counter name	Type	MIB counter name	Description
outputQueueMessages	long	tBgpPeerNgOperOutputQueueMsgs	tBgpPeerNgOperOutputQueueMsgs indicates the number of untransmitted messages in the queue, to this peer.
pathsReceived	long	tBgpPeerNgOperReceivedPaths	tBgpPeerNgOperReceivedPaths indicates the number of paths received from this peer.
prefixesActive	long	tBgpPeerNgOperActivePrefixes	tBgpPeerNgOperActivePrefixes indicates the number of active IPv4 prefixes from this peer.
prefixesReceived	long	tBgpPeerNgOperReceivedPrefixes	tBgpPeerNgOperReceivedPrefixes indicates the number of IPv4 prefixes received from this peer.
prefixesSent	long	tBgpPeerNgOperSentPrefixes	tBgpPeerNgOperSentPrefixes indicates the number of IPv4 prefixes transmitted to this peer.
prefixesSuppressedByDamping	long	tBgpPeerNgOperV4SuppPfxDamp	The value of tBgpPeerNgOperV4SuppPfxDamp indicates the number of IPv6 prefixes from this peer, which have been suppressed by damping.
v6ActivePrefixes	long	tBgpPeerNgOperV6ActivePrefixes	The value of tBgpPeerNgOperV6ActivePrefixes indicates the number of active IPv6 prefixes from this peer.
v6PrefixesSuppressedByDamping	long	tBgpPeerNgOperV6SuppPfxDamp	The value of tBgpPeerNgOperV6SuppPfxDamp indicates the number of IPv6 prefixes from this peer, which have been suppressed by damping.
v6ReceivedPrefixes	long	tBgpPeerNgOperV6ReceivedPrefixes	The value of tBgpPeerNgOperV6ReceivedPrefixes indicates the number of IPv6 prefixes received from this peer.
v6SentPrefixes	long	tBgpPeerNgOperV6SentPrefixes	The value of tBgpPeerNgOperV6SentPrefixes indicates the number of IPv6 prefixes transmitted to this peer.
vpnActivePrefixes	long	tBgpPeerNgOperVpnActivePrefixes	tBgpPeerNgOperVpnActivePrefixes indicates the number of active VPN IPv4 prefixes from this BGP peer.
vpnPrefixesSuppressedByDamping	long	tBgpPeerNgOperVpnSuppPfxDamp	The value of tBgpPeerNgOperVpnSuppPfxDamp indicates the number of VPN IPv4 prefixes from this peer, which have been suppressed by damping.
vpnReceivedPrefixes	long	tBgpPeerNgOperVpnRecvPrefixes	tBgpPeerNgOperVpnRecvPrefixes indicates the number of received VPN IPv4 prefixes.
vpnSentPrefixes	long	tBgpPeerNgOperVpnSentPrefixes	tBgpPeerNgOperVpnSentPrefixes indicates the number of transmitted VPN IPv4 prefixes.

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5620 SAM counter name	Type	MIB counter name	Description
PeerVprnIpv6Stats MIB table name: TIMETRA-BGP-MIB.tBgpPeerNgOperTable Monitored class: bgp.Peer			
vpnIpv6ActivePfxs	long	tBgpPeerNgOperVpnIpv6ActivePfxs	The value of tBgpPeerNgOperVpnIpv6ActivePfxs indicates the number of active VPN IPv6 prefixes from this peer.
vpnIpv6RecvPfxs	long	tBgpPeerNgOperVpnIpv6RecvPfxs	The value of tBgpPeerNgOperVpnIpv6RecvPfxs indicates the number of VPN IPv6 prefixes received from this peer.
vpnIpv6SentPfxs	long	tBgpPeerNgOperVpnIpv6SentPfxs	The value of tBgpPeerNgOperVpnIpv6SentPfxs indicates the number of VPN IPv6 prefixes transmitted to this peer.
vpnIpv6SuppPfxDamp	long	tBgpPeerNgOperVpnIpv6SuppPfxDamp	The value of tBgpPeerNgOperVpnIpv6SuppPfxDamp indicates the number of VPN IPv6 prefixes from this peer, which have been suppressed by damping.

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Table I-7 bundle statistics

5620 SAM counter name	Type	MIB counter name	Description
BundleStats MIB table name: TIMETRA-PORT-MIB.tmnxBundleTable Monitored class: bundle.Interface			
inputDiscards	long	tmnxBundleInputDiscards	tmnxBundleInputDiscards indicates the number of LCP packets that were discarded. This object is only supported for a tmnxBundleType value of mlppp.
upTime	long	tmnxBundleUpTime	tmnxBundleUpTime indicates the time since the bundle is operationally 'inService'.
MultiClassMlpppStats MIB table name: TIMETRA-PORT-MIB.tmnxMcMlpppStatsTable Monitored class: bundle.MultiClassMlpppSpecifics			
mcMlpppStatsEgressErrPkt	long	tmnxMcMlpppStatsEgressErrPkt	The value of tmnxMcMlpppStatsEgressErrPkt indicates the total number of packets discarded due to segmentation errors on the bundle for the given class on egress.
mcMlpppStatsEgressOct	long	tmnxMcMlpppStatsEgressOct	The value of tmnxMcMlpppStatsEgressOct indicates the total number of octets in all packets received on the bundle for the given class on egress before segmentation.

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5620 SAM counter name	Type	MIB counter name	Description
mcMlpppStatsEgressPkt	long	tmnxMcMlpppStatsEgressPkt	The value of tmnxMcMlpppStatsEgressPkt indicates the total number of packets forwarded on the bundle for the given class on egress towards the line.
mcMlpppStatsIngressErrPkt	long	tmnxMcMlpppStatsIngressErrPkt	The value of tmnxMcMlpppStatsIngressErrPkt indicates the total number of packets discarded due to reassembly errors on the bundle for the given class on ingress.
mcMlpppStatsIngressOct	long	tmnxMcMlpppStatsIngressOct	The value of tmnxMcMlpppStatsIngressOct indicates the total number of octets in all packets received on the bundle for the given class on ingress before reassembly.
mcMlpppStatsIngressPkt	long	tmnxMcMlpppStatsIngressPkt	The value of tmnxMcMlpppStatsIngressPkt indicates the total number of packets forwarded on the bundle for the given class on ingress towards higher layer protocols.

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Table I-8 dhcp statistics

5620 SAM counter name	Type	MIB counter name	Description
LocalDhcpServerStats MIB table name: TIMETRA-DHCP-SERVER-MIB.tmnxDhcpServerStatsTable Monitored class: dhcp.LocalDhcpServer			
addressUnavailableDropped	long	tmnxDhcpSvrStatsDropAddrUnavail	The value of tmnxDhcpSvrStatsDropAddrUnavail indicates the number of DHCP requests dropped by the server instance because the requested address is not available.
corruptedPacketsDropped	long	tmnxDhcpSvrStatsDropBadPackets	The value of tmnxDhcpSvrStatsDropBadPackets indicates the number of DHCP packets received which were corrupt.
destinedToOtherDropped	long	tmnxDhcpSvrStatsDropDestOther	The value of tmnxDhcpSvrStatsDropDestOther indicates the number of DHCP requests dropped by the server instance because the (broadcast) request was not destined to this server.
genericErrorDropped	long	tmnxDhcpSvrStatsDropGenError	The value of tmnxDhcpSvrStatsDropGenError indicates the number of DHCP packets dropped by the server instance because of a generic error.
invalidMessageTypesDropped	long	tmnxDhcpSvrStatsDropInvalidTypes	The value of tmnxDhcpSvrStatsDropInvalidTypes indicates the number of DHCP packets received which had an invalid message type (option 53).

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5620 SAM counter name	Type	MIB counter name	Description
invalidUserDropped	long	tmnxDhcpSvrStatsDropInvalidUsr	The value of tmnxDhcpSvrStatsDropInvalidUsr indicates the number of DHCP packets dropped by the server instance because the MAC address of the sender or the option 82 didn't match the host lease state.
leaseNotFoundDropped	long	tmnxDhcpSvrStatsDropNoLeaseFound	The value of tmnxDhcpSvrStatsDropNoLeaseFound indicates the number of DHCP packets dropped by the server instance because no (valid) lease was found.
leaseNotReadyDropped	long	tmnxDhcpSvrStatsDropLseNotReady	The value of tmnxDhcpSvrStatsDropLseNotReady indicates the number of DHCP packets dropped by the server instance before the lease database was ready.
leasesExpired	long	tmnxDhcpSvrStatsLeasesExpired	The value of tmnxDhcpSvrStatsLeasesExpired indicates the number of DHCP leases that were expired (because no release was received).
localUserDbNotFoundDropped	long	tmnxDhcpSvrStatsDropNoUsrDbFound	The value of tmnxDhcpSvrStatsDropNoUsrDbFound indicates the number of DHCP packets dropped because the value of the object tmnxDhcpServerCfgUserDatabase of this server instance is not equal to the default value and a local user database with that name could not be found.
noFreeAddressesInPoolDropped	long	tmnxDhcpSvrStatsDropNotSrvngPool	The value of tmnxDhcpSvrStatsDropNotSrvngPool indicates the number of DHCP packets dropped by the server instance because there were no more free addresses in the pool.
offersIgnored	long	tmnxDhcpSvrStatsOffersIgnore	The value of tmnxDhcpSvrStatsOffersIgnore indicates the number of DHCPOFFER (option 52 with value 2) packets sent by the DHCP server instance that were ignored by he clients.
overloadDropped	long	tmnxDhcpSvrStatsDropOverload	The value of tmnxDhcpSvrStatsDropOverload indicates the number of DHCP packets dropped by the server instance because they were received in excess of what the server instance can handle.
persistenceOverloadDropped	long	tmnxDhcpSvrStatsDropPersOverload	The value of tmnxDhcpSvrStatsDropPersOverload indicates the number of DHCP packets dropped by the server instance because they were received in excess of what the DHCP persistence system can handle. If this occurs, only releases and declines are still processed.

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5620 SAM counter name	Type	MIB counter name	Description
receivedDhcpDeclines	UINT128	tmnxDhcpSvrStatsRxDeclines	The value of tmnxDhcpSvrStatsRxDeclines indicates the number of DHCPDECLINE (option 53 with value 4) packets received by the DHCP server instance.
receivedDhcpDiscovers	UINT128	tmnxDhcpSvrStatsRxDiscovers	The value of tmnxDhcpSvrStatsRxDiscovers indicates the number of DHCPDISCOVER (option 53 with value 1) packets received by the DHCP server instance.
receivedDhcpInforms	UINT128	tmnxDhcpSvrStatsRxInforms	The value of tmnxDhcpSvrStatsRxInforms indicates the number of DHCPINFORM (option 53 with value 8) packets received by the DHCP server instance.
receivedDhcpReleases	UINT128	tmnxDhcpSvrStatsRxReleases	The value of tmnxDhcpSvrStatsRxReleases indicates the number of DHCPRELEASE (option 53 with value 7) packets received by the DHCP server instance.
receivedDhcpRequests	UINT128	tmnxDhcpSvrStatsRxRequests	The value of tmnxDhcpSvrStatsRxRequests indicates the number of DHCPREQUEST (option 53 with value 3) packets received by the DHCP server instance.
sentDhcpAcks	UINT128	tmnxDhcpSvrStatsTxAcks	The value of tmnxDhcpSvrStatsTxAcks indicates the number of DHCPACK (option 53 with value 5) packets sent by the DHCP server instance.
sentDhcpForceRenews	UINT128	tmnxDhcpSvrStatsTxForceRenews	The value of tmnxDhcpSvrStatsTxForceRenews indicates the number of DHCPFORCERENEW (option 53 with value 9) packets sent by the DHCP server instance.
sentDhcpNaks	UINT128	tmnxDhcpSvrStatsTxNaks	The value of tmnxDhcpSvrStatsTxNaks indicates the number of DHCPNAK (option 53 with value 6) packets sent by the DHCP server instance.
sentDhcpOffers	UINT128	tmnxDhcpSvrStatsTxOffers	The value of tmnxDhcpSvrStatsTxOffers indicates the number of DHCPOFFER (option 53 with value 2) packets sent by the DHCP server instance.
unknownHostsDropped	long	tmnxDhcpSvrStatsDropUnknownHosts	The value of tmnxDhcpSvrStatsDropUnknownHosts indicates the number of DHCP packets dropped from hosts which were not found in the user database when tmnxDhcpServerCfgUseGiAddress was disabled.
userNotAllowedDropped	long	tmnxDhcpSvrStatsDropUserNotAllow	The value of tmnxDhcpSvrStatsDropUserNotAllow indicates the number of DHCP packets dropped from hosts which are found in the user database, but which have no address or pool specified, nor has tmnxDhcpServerCfgUseGiAddress set to 'true'.

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5620 SAM counter name	Type	MIB counter name	Description
LocalDhcpServerSubnetStats MIB table name: TIMETRA-DHCP-SERVER-MIB.tmnxDhcpSvrSubnetStatsTable Monitored class: dhcp.Subnet			
declinedAddresses	long	tmnxDhcpSvrSubnetStatsDeclined	The value of tmnxDhcpSvrSubnetStatsDeclined indicates the number of addresses in this subnet that are declined.
forceRenewPendingLeases	long	tmnxDhcpSvrSubnetStatsFRPending	The value of tmnxDhcpSvrSubnetStatsFRPending indicates the number of leases in this subnet that are in state 'forceRenewPending.
freeAddresses	long	tmnxDhcpSvrSubnetStatsFree	The value of tmnxDhcpSvrSubnetStatsFree indicates the number of addresses in this subnet that are free.
offeredLeases	long	tmnxDhcpSvrSubnetStatsOffered	The value of tmnxDhcpSvrSubnetStatsOffered indicates the number of leases in this subnet that are in state 'offered'.
removePendingLeases	long	tmnxDhcpSvrSubnetStatsRemPending	The value of tmnxDhcpSvrSubnetStatsRemPending indicates the number of leases in this subnet that are in state 'removePending'.
stableLeases	long	tmnxDhcpSvrSubnetStatsStable	The value of tmnxDhcpSvrSubnetStatsStable indicates the number of leases in this subnet that are in state 'stable'.

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Table I-9 equipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AllocatedMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryPoolAllocated Monitored class: equipment.SystemStatsHolder			
allocatedMemory	long	sgiMemoryPoolAllocated	The value of sgiMemoryPoolAllocated indicates the total memory currently allocated in memory-pools on the system. This memory may or may not be currently in use, but is pre-allocated should the software need to use it.
AvailableMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryAvailable Monitored class: equipment.SystemStatsHolder			
availableMemory	long	sgiMemoryAvailable	The value of sgiMemoryAvailable indicates the amount of free memory in the overall system that is not allocated to memory pools, but is available in case a memory pool needs to grow.

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5620 SAM counter name	Type	MIB counter name	Description
CiscoHDLCStats MIB table name: TIMETRA-PORT-MIB.tmnxCiscoHDLCStatsTable Monitored classes: • tdmequipment.DS3E3Channel • tdmequipment.DS0ChannelGroup			
discardStatInPkts	long	tmnxCiscoHDLCDiscardStatInPkts	tmnxCiscoHDLCDiscardStatInPkts indicates the number of inbound Cisco HDLC packets discarded.
discardStatOutPkts	long	tmnxCiscoHDLCDiscardStatOutPkts	tmnxCiscoHDLCDiscardStatOutPkts indicates the number of outbound Cisco HDLC packets discarded.
statInOctets	long	tmnxCiscoHDLCStatInOctets	tmnxCiscoHDLCStatInOctets indicates the number of inbound Cisco HDLC octets.
statInPkts	long	tmnxCiscoHDLCStatInPkts	tmnxCiscoHDLCStatInPkts indicates the number of inbound Cisco HDLC packets.
statOutOctets	long	tmnxCiscoHDLCStatOutOctets	tmnxCiscoHDLCStatOutOctets indicates the number of outbound Cisco HDLC octets.
statOutPkts	long	tmnxCiscoHDLCStatOutPkts	tmnxCiscoHDLCStatOutPkts indicates the number of outbound Cisco HDLC packets.
FibNextHopStats MIB table name: TIMETRA-VRTR-MIB.vRtrFibStatNextHopTable Monitored class: equipment.BaseCard			
ipActive	long	vRtrFibStatNextHopIPActive	vRtrFibStatNextHopIPActive indicates current active IP next-hop counts for the FIB on the IOM.
ipAvailable	long	vRtrFibStatNextHopIPAvailable	vRtrFibStatNextHopIPAvailable indicates the available IP next-hop counts for the FIB on the IOM.
tunnelActive	long	vRtrFibStatNextHopTunnelActive	vRtrFibStatNextHopTunnelActive indicates current active Tunnel next-hop counts for the FIB on the IOM.
tunnelAvailable	long	vRtrFibStatNextHopTunnelAvailable	vRtrFibStatNextHopTunnelAvailable indicates the available Tunnel next-hop counts for the FIB on the IOM.
FibStats MIB table name: TIMETRA-VRTR-MIB.vRtrFibStatTable Monitored class: equipment.BaseCard			
aggrRoutes	long	vRtrFibStatAggrRoutes	vRtrFibStatAggrRoutes indicates current aggregate route counts for the virtual router.
alarmCount	long	vRtrFibStatAlarmCount	vRtrFibStatAlarmCount indicates the number of times the FIB has raised an alarm due to high FIB usage.
bgpRoutes	long	vRtrFibStatBGPRoutes	vRtrFibStatBGPRoutes indicates current BGP route counts for the virtual router.
bgpVpnRoutes	long	vRtrFibStatBGPVpnRoutes	vRtrFibStatBGPVpnRoutes indicates current BGP VPN route counts for the virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
directRoutes	long	vRtrFibStatDirectRoutes	vRtrFibStatDirectRoutes indicates current direct route counts for the virtual router.
highUtilization	boolean	vRtrFibStatHighUtilization	vRtrFibStatHighUtilization indicates whether or not the FIB on the IOM is experiences persistent high occupancy.
hostRoutes	long	vRtrFibStatHostRoutes	vRtrFibStatHostRoutes indicates current host route counts for the virtual router.
isisRoutes	long	vRtrFibStatISISRoutes	vRtrFibStatISISRoutes indicates current ISIS route counts for the virtual router.
lastAlarmTime	long	vRtrFibStatLastAlarmTime	vRtrFibStatLastAlarmTime indicates the last time a high FIB usage alarm was raised.
managedRoutes	long	vRtrFibStatManagedRoutes	vRtrFibStatManagedRoutes indicates current managed route counts for the virtual router.
ospfRoutes	long	vRtrFibStatOSPFRoutes	vRtrFibStatOSPFRoutes indicates current OSPF route counts for the virtual router.
overflows	long	vRtrFibStatOverflows	vRtrFibStatOverflows indicates the number of times the FIB has run out of space.
ripRoutes	long	vRtrFibStatRIPRoutes	vRtrFibStatRIPRoutes indicates current RIP route counts for the virtual router.
staticRoutes	long	vRtrFibStatStaticRoutes	vRtrFibStatStaticRoutes indicates current static route counts for the virtual router.
subMgmtRoutes	long	vRtrFibStatSubMgmtRoutes	vRtrFibStatSubMgmtRoutes indicates current Sub-management route counts for the virtual router.
v6AggrRoutes	long	vRtrFibStatV6AggrRoutes	vRtrFibStatV6AggrRoutes indicates current aggregate route counts for the virtual router.
v6BGPRoutes	long	vRtrFibStatV6BGPRoutes	vRtrFibStatV6BGPRoutes indicates current BGP route counts for the virtual router.
v6BGPVpnRoutes	long	vRtrFibStatV6BGPVpnRoutes	vRtrFibStatV6BGPVpnRoutes indicates current BGP VPN route counts for the virtual router.
v6DirectRoutes	long	vRtrFibStatV6DirectRoutes	vRtrFibStatV6DirectRoutes indicates current direct route counts for the virtual router.
v6HostRoutes	long	vRtrFibStatV6HostRoutes	vRtrFibStatV6HostRoutes indicates current host route counts for the virtual router.
v6ISISRoutes	long	vRtrFibStatV6ISISRoutes	vRtrFibStatV6ISISRoutes indicates current ISIS route counts for the virtual router.
v6ManagedRoutes	long	vRtrFibStatV6ManagedRoutes	vRtrFibStatV6ManagedRoutes indicates current managed route counts for the virtual router.
v6OSPFRoutes	long	vRtrFibStatV6OSPFRoutes	vRtrFibStatV6OSPFRoutes indicates current OSPF route counts for the virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
v6RIPRoutes	long	vRtrFibStatV6RIPRoutes	vRtrFibStatV6RIPRoutes indicates current RIP route counts for the virtual router.
v6StaticRoutes	long	vRtrFibStatV6StaticRoutes	vRtrFibStatV6StaticRoutes indicates current static route counts for the virtual router.
v6SubMgmtRoutes	long	vRtrFibStatV6SubMgmtRoutes	vRtrFibStatV6SubMgmtRoutes indicates current Sub-management route counts for the virtual router.
InterfaceAdditionalStats MIB table name: IF-MIB.ifXTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
receivedBroadcastPackets	UINT128	ifHCInBroadcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of ifInBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedMulticastPackets	UINT128	ifHCInMulticastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifInMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedTotalOctets	UINT128	ifHCInOctets	The total number of octets received on the interface, including framing characters. This object is a 64-bit version of ifInOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	UINT128	ifHCInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of ifInUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedBroadcastPackets	UINT128	ifHCOutBroadcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedMulticastPackets	UINT128	ifHCOutMulticastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifOutMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedTotalOctets	UINT128	ifHCOutOctets	The total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of ifOutOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	UINT128	ifHCOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
InterfaceStats MIB table name: IF-MIB.ifTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			

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5620 SAM counter name	Type	MIB counter name	Description
outboundBadPackets	long	ifOutErrors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
outboundPacketsDiscarded	long	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedBadPackets	long	ifInErrors	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character- oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedOctets	long	ifInOctets	The total number of octets received on the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedPacketsDiscarded	long	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedUnicastPackets	long	ifInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnknownProtocolPackets	long	ifInUnknownProtos	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedOctets	long	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	long	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
IpSecMDAStats MIB table name: TIMETRA-IPSEC-MIB.tmnxIPsecMdaDpStatsTable Monitored class: equipment.DaughterCardSlot			
decryptBytes	UINT128	tmnxIPsecMdaDpStatsDecryptBytes	The value of tmnxIPsecMdaDpStatsDecryptBytes indicates the number of bytes encrypted by the IPsec data path.
decryptPackets	UINT128	tmnxIPsecMdaDpStatsDecryptPkts	The value of tmnxIPsecMdaDpStatsDecryptPkts indicates the number of packets encrypted by the IPsec data path.
encryptBytes	UINT128	tmnxIPsecMdaDpStatsEncryptBytes	The value of tmnxIPsecMdaDpStatsEncryptBytes indicates the number of bytes encrypted by the IPsec data path.

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5620 SAM counter name	Type	MIB counter name	Description
encryptPackets	UINT128	tmnxIPsecMdaDpStatsEncryptPkts	The value of tmnxIPsecMdaDpStatsEncryptPkts indicates the number of packets encrypted by the IPsec data path.
inboundIPDropPackets	UINT128	tmnxIPsecMdaDpStatsInBDropPkts	The value of tmnxIPsecMdaDpStatsInBDropPkts indicates the number of packets dropped before and during inbound (decryption) processing by the IPsec data path.
inboundIPDstSrcMismatches	long	tmnxIPsecMdaDpStatsInBIPDstSrcMismatches	The value of tmnxIPsecMdaDpStatsInBIPDstSrcMismatches indicates the number of packets dropped before inbound (decryption) processing by the IPsec data path due to the received packet's outer IP destination or source address does not match the Tunnel's local or peer gateway address.
inboundSaMisses	UINT128	tmnxIPsecMdaDpStatsInBSAMisses	The value of tmnxIPsecMdaDpStatsInBSAMisses indicates the number of packets dropped before inbound (decryption) processing by the IPsec data path due to no SA (security association) present.
outboundIPDropPackets	UINT128	tmnxIPsecMdaDpStatsOutBDropPkts	The value of tmnxIPsecMdaDpStatsOutBDropPkts indicates the number of packets dropped before and during outbound (encryption) processing by the IPsec data path.
outboundPolicyEntryMisses	long	tmnxIPsecMdaDpStatsOutBPolicyEntryMisses	The value of tmnxIPsecMdaDpStatsOutBPolicyEntryMisses indicates the number of packets dropped before outbound (encryption) processing by the IPsec data path due to no matching Policy Entry.
outboundSaMisses	UINT128	tmnxIPsecMdaDpStatsOutBSAMisses	The value of tmnxIPsecMdaDpStatsOutBSAMisses indicates the number of packets dropped before outbound (encryption) processing by the IPsec data path due to no SA (security association) present.
transmitPacketErrors	long	tmnxIPsecMdaDpStatsTxPktErrs	The value of tmnxIPsecMdaDpStatsTxPktErrs indicates the number of packets transmit failures by the IPsec data path.
MediaIndependentStats MIB table name: HC-RMON-MIB.mediaIndependentTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dropEvents	long	mediaIndependentDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.

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5620 SAM counter name	Type	MIB counter name	Description
droppedFrames	long	mediaIndependentDroppedFrames	The total number of frames which were received by the probe and therefore not accounted for in the mediaIndependentDropEvents, but for which the probe chose not to count for this entry for whatever reason. Most often, this event occurs when the probe is out of some resources and decides to shed load from this collection. This count does not include packets that were not counted because they had MAC-layer errors. Note that, unlike the dropEvents counter, this number is the exact number of frames dropped.
duplex	int	mediaIndependentDuplexMode	The current mode of this link. Note that if the link has full-duplex capabilities but is operating in half-duplex mode, this value will be halfduplex(1).
duplexChanges	long	mediaIndependentDuplexChanges	The number of times this link has changed from full-duplex mode to half-duplex mode or from half-duplex mode to full-duplex mode.
inputSpeed	long	mediaIndependentInputSpeed	The nominal maximum speed in kilobits per second of this half-duplex link or on the inbound connection of this full-duplex link. If the speed is unknown or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
outputSpeed	long	mediaIndependentOutputSpeed	The nominal maximum speed in kilobits per second of this full-duplex link in the direction of the network. If the speed is unknown, the link is half-duplex, or there is no fixed maximum (e.g. a compressed link), this value shall be zero.
receivedBadPackets	long	mediaIndependentInErrors	The total number of bad packets received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedNonUnicastPackets	UINT128	mediaIndependentInNUCastHighCapacityPkts	The total number of non-unicast packets (including bad packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
receivedOctets	UINT128	mediaIndependentInHighCapacityOctets	The total number of octets of data (including those in bad packets) received (excluding framing bits but including FCS octets) on a half-duplex link or on the inbound connection of a full-duplex link.
receivedPackets	UINT128	mediaIndependentInHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a half-duplex link or on the inbound connection of a full-duplex link.
transmittedBadPackets	long	mediaIndependentOutErrors	The total number of bad packets received on a full-duplex link in the direction of the network.
transmittedNonUnicastPackets	UINT128	mediaIndependentOutNUCastHighCapacityPkts	The total number of packets (including bad packets) received on a full-duplex link in the direction of the network.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedOctets	UINT128	mediaIndependentOutHighCapacityOctets	The total number of octets of data (including those in bad packets) received on a full-duplex link in the direction of the network (excluding framing bits but including FCS octets).
transmittedPackets	UINT128	mediaIndependentOutHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received on a full-duplex link in the direction of the network.
PortNetEgressStats MIB table name: TIMETRA-PORT-MIB.tmnxPortNetEgressStatsTable Monitored class: equipment.PhysicalPort			
inProfileOctetsDropped	UINT128	tmnxPortNetEgressDroInProfOcts	tmnxPortNetEgressDroInProfOcts indicates the number of conforming network egress octets dropped on this port using this queue.
inProfileOctetsForwarded	UINT128	tmnxPortNetEgressFwdInProfOcts	tmnxPortNetEgressFwdInProfOcts indicates the number of conforming network egress octets forwarded on this port using this queue.
inProfilePacketsDropped	UINT128	tmnxPortNetEgressDroInProfPkts	tmnxPortNetEgressDroInProfPkts indicates the number of conforming network egress packets dropped on this port using this queue.
inProfilePacketsForwarded	UINT128	tmnxPortNetEgressFwdInProfPkts	tmnxPortNetEgressFwdInProfPkts indicates the number of conforming network egress packets forwarded on this port using this queue.
outOfProfileOctetsDropped	UINT128	tmnxPortNetEgressDroOutProfOcts	tmnxPortNetEgressDroOutProfOcts indicates the number of exceeding network egress octets dropped on this port using this queue.
outOfProfileOctetsForwarded	UINT128	tmnxPortNetEgressFwdOutProfOcts	tmnxPortNetEgressFwdOutProfOcts indicates the number of exceeding network egress octets forwarded on this port using this queue.
outOfProfilePacketsDropped	UINT128	tmnxPortNetEgressDroOutProfPkts	tmnxPortNetEgressDroOutProfPkts indicates the number of exceeding network egress packets dropped on this port using this queue.
outOfProfilePacketsForwarded	UINT128	tmnxPortNetEgressFwdOutProfPkts	tmnxPortNetEgressFwdOutProfPkts indicates the number of exceeding network egress packets forwarded on this port using this queue.
queueId	long	tmnxPortNetEgressQueueIndex	tmnxPortNetEgressQueueIndex serves as the tertiary index. When used in conjunction with tmnxChassisIndex and tmnxPortPortID, it uniquely identifies a network egress queue for the specified port in the managed system.
PortNetIngressStats MIB table name: TIMETRA-PORT-MIB.tmnxPortNetIngressStatsTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
inProfileOctetsDropped	UINT128	tmnxPortNetIngressDroInProfOcts	tmnxPortNetIngressDroInProfOcts indicates the number of conforming network ingress octets dropped on this port using this queue.
inProfileOctetsForwarded	UINT128	tmnxPortNetIngressFwdInProfOcts	tmnxPortNetIngressFwdInProfOcts indicates the number of conforming network ingress octets forwarded on this port using this queue.
inProfilePacketsDropped	UINT128	tmnxPortNetIngressDroInProfPkts	tmnxPortNetIngressDroInProfPkts indicates the number of conforming network ingress packets dropped on this port using this queue.
inProfilePacketsForwarded	UINT128	tmnxPortNetIngressFwdInProfPkts	tmnxPortNetIngressFwdInProfPkts indicates the number of conforming network ingress packets forwarded on this port using this queue.
outOfProfileOctetsDropped	UINT128	tmnxPortNetIngressDroOutProfOcts	tmnxPortNetIngressDroOutProfOcts indicates the number of exceeding network ingress octets dropped on this port using this queue.
outOfProfileOctetsForwarded	UINT128	tmnxPortNetIngressFwdOutProfOcts	tmnxPortNetIngressFwdOutProfOcts indicates the number of exceeding network ingress octets forwarded on this port using this queue.
outOfProfilePacketsDropped	UINT128	tmnxPortNetIngressDroOutProfPkts	tmnxPortNetIngressDroOutProfPkts indicates the number of exceeding network ingress packets dropped on this port using this queue.
outOfProfilePacketsForwarded	UINT128	tmnxPortNetIngressFwdOutProfPkts	tmnxPortNetIngressFwdOutProfPkts indicates the number of exceeding network ingress packets forwarded on this port using this queue.
PortTerminationStats MIB table name: TIMETRA-PORT-MIB.tmnxBundleMemberImaTable Monitored class: bundle.PortTermination			
bundleMemberImaErrorIcpCells	long	tmnxBundleMemberImaErrorIcpCells	tmnxBundleMemberImaErrorIcpCells indicates the number of ICP cells with HEC or CRC-10 errors.
bundleMemberImaFeRxNumFails	long	tmnxBundleMemberImaFeRxNumFails	tmnxBundleMemberImaFeRxNumFails indicates the number of times that a far-end receive alarm is set on the IMA link.
bundleMemberImaFeRxUnuseSecs	long	tmnxBundleMemberImaFeRxUnuseSecs	tmnxBundleMemberImaFeRxUnuseSecs indicates the number of unavailable seconds at the far-end receive link state machine.
bundleMemberImaFeSevErrSecs	long	tmnxBundleMemberImaFeSevErrSecs	tmnxBundleMemberImaFeSevErrSecs indicates the number of one second intervals in which the far-end contains IMA-RDI defects.
bundleMemberImaFeTxNumFails	long	tmnxBundleMemberImaFeTxNumFails	tmnxBundleMemberImaFeTxNumFails indicates the number of times that a far-end transmit alarm is set on the IMA link.

5620 SAM counter name	Type	MIB counter name	Description
bundleMemberImaFeTxUnuseSecs	long	tmnxBundleMemberImaFeTxUnuseSecs	tmnxBundleMemberImaFeTxUnuseSecs indicates the number of unavailable seconds at the far-end transmit link state machine.
bundleMemberImaFeUnavailSecs	long	tmnxBundleMemberImaFeUnavailSecs	tmnxBundleMemberImaFeUnavailSecs indicates the number of unavailable seconds at the near-end.
bundleMemberImaLstRxIcpCells	long	tmnxBundleMemberImaLstRxIcpCells	tmnxBundleMemberImaLstRxIcpCells indicates the number of lost ICP cells at the expected offset.
bundleMemberImaNeRxNumFails	long	tmnxBundleMemberImaNeRxNumFails	tmnxBundleMemberImaNeRxNumFails indicates the number of times that a near-end receive alarm is set on the IMA link.
bundleMemberImaNeRxUnuseSecs	long	tmnxBundleMemberImaNeRxUnuseSecs	tmnxBundleMemberImaNeRxUnuseSecs indicates the number of unavailable seconds at the near-end receive link state machine.
bundleMemberImaNeSevErrSecs	long	tmnxBundleMemberImaNeSevErrSecs	tmnxBundleMemberImaNeSevErrSecs indicates the number of one second intervals in which thirty percent or more of the near-end ICP cells are in violation, or link defects have occurred.
bundleMemberImaNeTxNumFails	long	tmnxBundleMemberImaNeTxNumFails	tmnxBundleMemberImaNeTxNumFails indicates the number of times that a near-end transmit alarm is set on the IMA link.
bundleMemberImaNeTxUnuseSecs	long	tmnxBundleMemberImaNeTxUnuseSecs	tmnxBundleMemberImaNeTxUnuseSecs indicates the number of unavailable seconds at the near-end transmit link state machine.
bundleMemberImaNeUnavailSecs	long	tmnxBundleMemberImaNeUnavailSecs	tmnxBundleMemberImaNeUnavailSecs indicates the number of unavailable seconds at the near-end.
bundleMemberImaOifAnomalies	long	tmnxBundleMemberImaOifAnomalies	tmnxBundleMemberImaOifAnomalies indicates the number of OIF anomalies at the near-end.
bundleMemberImaRxIcpCells	long	tmnxBundleMemberImaRxIcpCells	tmnxBundleMemberImaRxIcpCells indicates the number of ICP cells that have been received on the IMA link.
bundleMemberImaTxIcpCells	long	tmnxBundleMemberImaTxIcpCells	tmnxBundleMemberImaTxIcpCells indicates the number of ICP cells that have been transmitted on the IMA link.
bundleMemberImaViolations	long	tmnxBundleMemberImaViolations	tmnxBundleMemberImaViolations indicates the number of ICP violations including errored, invalid or missing ICP cells.
SystemCpuStats MIB table name: TIMETRA-SYSTEM-MIB.sgiCpuUsage Monitored class: equipment.SystemStatsHolder			
systemCpuUsage	long	sgiCpuUsage	The value of sgiCpuUsage indicates the current CPU utilization for the system.

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5620 SAM counter name	Type	MIB counter name	Description
SystemMemoryStats MIB table name: TIMETRA-SYSTEM-MIB.sgiMemoryUsed Monitored class: equipment.SystemStatsHolder			
systemMemoryUsage	long	sgiMemoryUsed	The value of sgiMemoryUsed indicates the total pre-allocated pool memory currently in use on the system.

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Table I-10 ethernetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AdditionalEthernetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortEtherTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
highCapacityPackets1519toMaxFrameSize	UINT128	tmnxPortEtherHCPkts1519toMax	The total number of packets (including bad packets) received that were between 1519 octets in length and the maximum frame size, usually 12287 octets inclusive (excluding framing bits but including FCS octets). The lower 32-bits of this 64-bit counter will equal the value of tmnxPortEtherHCPkts1519toMax. The high 32-bits of this counter will equal the value of tmnxPortEtherHCOverPkts1519toMax.
packets1519toMaxFrameSize	long	tmnxPortEtherPkts1519toMax	The total number of packets received that were longer than 1518 octets but less than the maximum frame size for the particular medium, usually 12287 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
Dot3Stats MIB table name: EtherLike-MIB.dot3StatsTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
alignmentErrors	long	dot3StatsAlignmentErrors	A count of frames received on a particular interface that are not an integral number of octets in length and do not pass the FCS check. The count represented by an instance of this object is incremented when the alignmentError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. This counter does not increment for group encoding schemes greater than 4 bits per group. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsAlignmentErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.7, aAlignmentErrors.
carrierSenseErrors	long	dot3StatsCarrierSenseErrors	The number of times that the carrier sense condition was lost or never asserted when attempting to transmit a frame on a particular interface. The count represented by an instance of this object is incremented at most once per transmission attempt, even if the carrier sense condition fluctuates during a transmission attempt. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.13, aCarrierSenseErrors.

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5620 SAM counter name	Type	MIB counter name	Description
deferredTransmissions	long	dot3StatsDeferredTransmissions	A count of frames for which the first transmission attempt on a particular interface is delayed because the medium is busy. The count represented by an instance of this object does not include frames involved in collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.9, aFramesWithDeferredXmissions.
duplex	int	dot3StatsDuplexStatus	The current mode of operation of the MAC entity. 'unknown' indicates that the current duplex mode could not be determined. Management control of the duplex mode is accomplished through the MAU MIB. When an interface does not support autonegotiation, or when autonegotiation is not enabled, the duplex mode is controlled using ifMauDefaultType. When autonegotiation is supported and enabled, duplex mode is controlled using ifMauAutoNegAdvertisedBits. In either case, the currently operating duplex mode is reflected both in this object and in ifMauType. Note that this object provides redundant information with ifMauType. Normally, redundant objects are discouraged. However, in this instance, it allows a management application to determine the duplex status of an interface without having to know every possible value of ifMauType. This was felt to be sufficiently valuable to justify the redundancy. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.32, aDuplexStatus.
excessiveCollisions	long	dot3StatsExcessiveCollisions	A count of frames for which transmission on a particular interface fails due to excessive collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.11, aFramesAbortedDueToXSColls.

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5620 SAM counter name	Type	MIB counter name	Description
fcsErrors	long	dot3StatsFCSErrors	A count of frames received on a particular interface that are an integral number of octets in length but do not pass the FCS check. This count does not include frames received with frame-too-long or frame-too-short error. The count represented by an instance of this object is incremented when the frameCheckError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. Note: Coding errors detected by the physical layer for speeds above 10 Mb/s will cause the frame to fail the FCS check. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFCSErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.6, aFrameCheckSequenceErrors.
frameTooLongs	long	dot3StatsFrameTooLongs	A count of frames received on a particular interface that exceed the maximum permitted frame size. The count represented by an instance of this object is incremented when the frameTooLong status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. For interfaces operating at 10 Gb/s, this counter can roll over in less than 80 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsFrameTooLongs object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.25, aFrameTooLongErrors.

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5620 SAM counter name	Type	MIB counter name	Description
internalMacReceiveErrors	long	dot3StatsInternalMacReceiveErrors	A count of frames for which reception on a particular interface fails due to an internal MAC sublayer receive error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsFrameTooLongs object, the dot3StatsAlignmentErrors object, or the dot3StatsFCSErrors object. The precise meaning of the count represented by an instance of this object is implementation-specific. In particular, an instance of this object may represent a count of receive errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacReceiveErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.15, aFramesLostDueToIntMACRcvError.
internalMacTransmitErrors	long	dot3StatsInternalMacTransmitErrors	A count of frames for which transmission on a particular interface fails due to an internal MAC sublayer transmit error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsLateCollisions object, the dot3StatsExcessiveCollisions object, or the dot3StatsCarrierSenseErrors object. The precise meaning of the count represented by an instance of this object is implementation- specific. In particular, an instance of this object may represent a count of transmission errors on a particular interface that are not otherwise counted. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsInternalMacTransmitErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.12, aFramesLostDueToIntMACXmitError.

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5620 SAM counter name	Type	MIB counter name	Description
lateCollisions	long	dot3StatsLateCollisions	The number of times that a collision is detected on a particular interface later than one slotTime into the transmission of a packet. A (late) collision included in a count represented by an instance of this object is also considered as a (generic) collision for purposes of other collision-related statistics. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.10, aLateCollisions.
multipleCollisionFrames	long	dot3StatsMultipleCollisionFrames	A count of frames that are involved in more than one collision and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsSingleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.4, aMultipleCollisionFrames.
singleCollisionFrames	long	dot3StatsSingleCollisionFrames	A count of frames that are involved in a single collision, and are subsequently transmitted successfully. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsMultipleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.3, aSingleCollisionFrames.

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5620 SAM counter name	Type	MIB counter name	Description
sqeTestErrors	long	dot3StatsSQETestErrors	A count of times that the SQE TEST ERROR is received on a particular interface. The SQE TEST ERROR is set in accordance with the rules for verification of the SQE detection mechanism in the PLS Carrier Sense Function as described in IEEE Std. 802.3, 2000 Edition, section 7.2.4.6. This counter does not increment on interfaces operating at speeds greater than 10 Mb/s, or on interfaces operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 7.2.4.6, also 30.3.2.1.4, aSQETestErrors.

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5620 SAM counter name	Type	MIB counter name	Description
symbolErrors	long	dot3StatsSymbolErrors	For an interface operating at 100 Mb/s, the number of times there was an invalid data symbol when a valid carrier was present. For an interface operating in half-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than slotTime, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' or 'carrier extend error' on the GMII. For an interface operating in full-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' on the GMII. For an interface operating at 10 Gb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Receive Error' on the XGMII. The count represented by an instance of this object is incremented at most once per carrier event, even if multiple symbol errors occur during the carrier event. This count does not increment if a collision is present. This counter does not increment when the interface is operating at 10 Mb/s. For interfaces operating at 10 Gb/s, this counter can roll over in less than 5 minutes if it is incrementing at its maximum rate. Since that amount of time could be less than a management station's poll cycle time, in order to avoid a loss of information, a management station is advised to poll the dot3HCStatsSymbolErrors object for 10 Gb/s or faster interfaces. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.2.1.5, aSymbolErrorDuringCarrier.
EthernetHighCapacityStats MIB table name: HC-RMON-MIB.etherStatsHighCapacityTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
packets1024to1518Octets	UINT128	etherStatsHighCapacityPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
packets128to255Octets	UINT128	etherStatsHighCapacityPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	UINT128	etherStatsHighCapacityPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	UINT128	etherStatsHighCapacityPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	UINT128	etherStatsHighCapacityPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	UINT128	etherStatsHighCapacityPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
totalOctets	UINT128	etherStatsHighCapacityOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). If the network is half-duplex Fast Ethernet, this object can be used as a reasonable estimate of utilization. If greater precision is desired, the etherStatsHighCapacityPkts and etherStatsHighCapacityOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (.96 + .64) + (Octets * .08) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent. This table is not appropriate for monitoring full-duplex ethernets. If the network is a full-duplex ethernet and the mediaIndependentTable is monitoring that network, the utilization can be calculated as follows: 1) Determine the utilization of the inbound path by using the appropriate equation (for ethernet or fast ethernet) to determine the utilization, substituting mediaIndependentInPkts for etherStatsHighCapacityPkts, and mediaIndependentInOctets for etherStatsHighCapacityOctets. Call the resulting utilization inUtilization. 2) Determine the utilization of the outbound path by using the same equation to determine the utilization, substituting mediaIndependentOutPkts for etherStatsHighCapacityPkts, and mediaIndependentOutOctets for etherStatsHighCapacityOctets. Call the resulting utilization outUtilization. 3) The utilization is the maximum of inUtilization and outUtilization. This metric shows the amount of percentage of bandwidth that is left before congestion will be experienced on the link.
totalPackets	UINT128	etherStatsHighCapacityPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
EthernetStats MIB table name: RMON-MIB.etherStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
broadcastPackets	long	etherStatsBroadcastPkts	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets.

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5620 SAM counter name	Type	MIB counter name	Description
collisions	long	etherStatsCollisions	The best estimate of the total number of collisions on this Ethernet segment. The value returned will depend on the location of the RMON probe. Section 8.2.1.3 (10BASE-5) and section 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision, in the receive mode, if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coax segments to which the repeater is connected.
crcAlignErrors	long	etherStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
dropEvents	long	etherStatsDropEvents	The total number of events in which packets were dropped by the probe due to lack of resources. Note that this number is not necessarily the number of packets dropped; it is just the number of times this condition has been detected.
fragments	long	etherStatsFragments	The total number of packets received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that it is entirely normal for etherStatsFragments to increment. This is because it counts both runts (which are normal occurrences due to collisions) and noise hits.

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5620 SAM counter name	Type	MIB counter name	Description
jabbers	long	etherStatsJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different than the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition where any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
multicastPackets	long	etherStatsMulticastPkts	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address.
oversizePackets	long	etherStatsOversizePkts	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed.
packets1024to1518Octets	long	etherStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets).
packets128to255Octets	long	etherStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets256to511Octets	long	etherStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets512to1023Octets	long	etherStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).
packets64Octets	long	etherStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	long	etherStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).

5620 SAM counter name	Type	MIB counter name	Description
totalOctets	long	etherStatsOctets	The total number of octets of data (including those in bad packets) received on the network (excluding framing bits but including FCS octets). This object can be used as a reasonable estimate of 10-Megabit ethernet utilization. If greater precision is desired, the etherStatsPkts and etherStatsOctets objects should be sampled before and after a common interval. The differences in the sampled values are Pkts and Octets, respectively, and the number of seconds in the interval is Interval. These values are used to calculate the Utilization as follows: Pkts * (9.6 + 6.4) + (Octets * .8) Utilization = ---------- Interval * 10,000 The result of this equation is the value Utilization which is the percent utilization of the ethernet segment on a scale of 0 to 100 percent.
totalPackets	long	etherStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received.
undersizePackets	long	etherStatsUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.
OtuIfStats MIB table name: TIMETRA-OTU-MIB.tmnxOtuIfRawStatsTable Monitored class: equipment.PhysicalPort			
fecCorrOnes	long	tmnxOtuIfRawStatsFECCorrOnes	The value of tmnxOtuIfRawStatsFECCorrOnes indicates the number of Forward Error Correction (FEC) corrected ones.
fecCorrZeros	long	tmnxOtuIfRawStatsFECCorrZeros	The value of tmnxOtuIfRawStatsFECCorrZeros indicates the number of Forward Error Correction (FEC) corrected zeros.
fecSes	long	tmnxOtuIfRawStatsFECSES	The value of tmnxOtuIfRawStatsFECSES indicates the number of Forward Error Correction (FEC) Severely Errors Seconds (SES).
fecUncorrSr	long	tmnxOtuIfRawStatsFECUncorrSR	The value of tmnxOtuIfRawStatsFECUncorrSR indicates the number of Forward Error Correction (FEC) Uncorrectable Sub-Rows.
hcFecCorrOnes	UINT128	tmnxOtuIfRawStatsHCFECCorrOnes	The value of tmnxOtuIfRawStatsFECCorrOnes indicates the High Capacity number of Forward Error Correction (FEC) corrected ones.
hcFecCorrZeros	UINT128	tmnxOtuIfRawStatsHCFECCorrZeros	The value of tmnxOtuIfRawStatsHCFECCorrZeros indicates the High Capacity number of Forward Error Correction (FEC) corrected zeros.

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5620 SAM counter name	Type	MIB counter name	Description
hcFecUncorrSr	UINT128	tmnxOtuIfRawStatsHCFECUncorrSR	The value of tmnxOtuIfRawStatsHCFECUncorrSR indicates the High Capacity number of Forward Error Correction (FEC) Uncorrectable Sub-Rows.
hcPmBei	UINT128	tmnxOtuIfRawStatsHCPMBEI	The value of tmnxOtuIfRawStatsPMBEI indicates the High Capacity number of Path Monitoring (PM) Backward Error Indication (BEI) errors.
hcPmBip8	UINT128	tmnxOtuIfRawStatsHCPMBIP8	The value of tmnxOtuIfRawStatsHCPMBIP8 indicates the High Capacity number of Path Monitoring (PM) BIP8 errors.
hcSmBei	UINT128	tmnxOtuIfRawStatsHCSMBEI	The value of tmnxOtuIfRawStatsHCSMBEI indicates the High Capacity number of Section Monitoring (SM) Backward Error Indication (BEI) errors.
hcSmBip8	UINT128	tmnxOtuIfRawStatsHCSMBIP8	The value of tmnxOtuIfRawStatsHCSMBIP8 indicates the High Capacity number of Section Monitoring (SM) BIP8 errors.
ofFecCorrOnes	long	tmnxOtuIfRawStatsOFFECCorrOnes	The value of tmnxOtuIfRawStatsFECCorrOnes indicates the number of times the tmnxOtuIfRawStatsFECCorrOnes overflowed.
ofFecCorrZeros	long	tmnxOtuIfRawStatsOFFECCorrZeros	The value of tmnxOtuIfRawStatsOFFECCorrZeros indicates the number of times the tmnxOtuIfRawStatsFECCorrZeros overflowed.
ofFecUncorrSr	long	tmnxOtuIfRawStatsOFFECUncorrSR	The value of tmnxOtuIfRawStatsOFFECUncorrSR indicates the number of times the tmnxOtuIfRawStatsFECUncorrSR overflowed.
ofPmBei	long	tmnxOtuIfRawStatsOFPMBEI	The value of tmnxOtuIfRawStatsOFPMBEI indicates the number of times tmnxOtuIfRawStatsPMBEI overflowed.
ofPmBip8	long	tmnxOtuIfRawStatsOFPMBIP8	The value of tmnxOtuIfRawStatsOFPMBIP8 indicates the number of times the tmnxOtuIfRawStatsPMBIP8 overflowed.
ofSmBei	long	tmnxOtuIfRawStatsOFSMBEI	The value of tmnxOtuIfRawStatsOFSMBEI indicates the number of times the tmnxOtuIfRawStatsSMBEI overflowed.
ofSmBip8	long	tmnxOtuIfRawStatsOFSMBIP8	The value of tmnxOtuIfRawStatsOFSMBIP8 indicates the number of times the tmnxOtuIfRawStatsSMBIP8 overflowed.
pmBei	long	tmnxOtuIfRawStatsPMBEI	The value of tmnxOtuIfRawStatsPMBEI indicates the number of Path Monitoring (PM) Backward Error Indication (BEI) errors.
pmBip8	long	tmnxOtuIfRawStatsPMBIP8	The value of tmnxOtuIfRawStatsPMBIP8 indicates the number of Path Monitoring (PM) BIP8 errors.

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5620 SAM counter name	Type	MIB counter name	Description
pmSes	long	tmnxOtuIfRawStatsPMSES	The value of tmnxOtuIfRawStatsPMSES indicates the number of Path Monitoring (PM) Severely Errored Seconds (SES).
smBei	long	tmnxOtuIfRawStatsSMBEI	The value of tmnxOtuIfRawStatsSMBEI indicates the number of Section Monitoring (SM) Backward Error Indication (BEI) errors.
smBip8	long	tmnxOtuIfRawStatsSMBIP 8	The value of tmnxOtuIfRawStatsSMBIP8 indicates the number of Section Monitoring (SM) BIP8 errors.
smSes	long	tmnxOtuIfRawStatsSMSES	The value of tmnxOtuIfRawStatsSMSES indicates the number of Section Monitoring (SM) Severely Errored Seconds (SES).
PortEgrQosQueueStat MIB table name: TIMETRA-PORT-MIB.tmnxPortEgrQosQStatTable Monitored class: ethernetequipment.AccessEgrQGroup			
portEgrQosQStatDpdInProfOcts	UINT128	tmnxPortEgrQosQStatDpd InProfOcts	The value of tmnxPortEgrQosQStatDpdInProfOcts indicates the number of in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatDpdInProfPkts	UINT128	tmnxPortEgrQosQStatDpd InProfPkts	The value of tmnxPortEgrQosQStatDpdInProfPkts indicates the number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatDpdOutProfOcts	UINT128	tmnxPortEgrQosQStatDpd OutProfOcts	The value of tmnxPortEgrQosQStatDpdOutProfOcts indicates the number of out-of-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatDpdOutProfPkts	UINT128	tmnxPortEgrQosQStatDpd OutProfPkts	The value of tmnxPortEgrQosQStatDpdOutProfPkts indicates the number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portEgrQosQStatFwdInProfOcts	UINT128	tmnxPortEgrQosQStatFwd InProfOcts	The value of tmnxPortEgrQosQStatFwdInProfOcts indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
portEgrQosQStatFwdInProfPkts	UINT128	tmnxPortEgrQosQStatFwd InProfPkts	The value of tmnxPortEgrQosQStatFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
portEgrQosQStatFwdOutProfOcts	UINT128	tmnxPortEgrQosQStatFwd OutProfOcts	The value of tmnxPortEgrQosQStatFwdOutProfOcts indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
portEgrQosQStatFwdOutProfPkts	UINT128	tmnxPortEgrQosQStatFwdOutProfPkts	The value of tmnxPortEgrQosQStatFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
portEgrQosQStatQueueId	long	tmnxPortEgrQosQStatQueueId	The value of tmnxPortEgrQosQStatQueueId specifies the queue-group queue ID which is used as the fourth index to the table entry.
PortIngQosQueueStat MIB table name: TIMETRA-PORT-MIB.tmnxPortIngQosQStatTable Monitored class: ethernetequipment.AccessIngrQGroup			
portIngQosQStatDpdHiPrioOcts	UINT128	tmnxPortIngQosQStatDpdHiPrioOcts	The value of tmnxPortIngQosQStatDpdHiPrioOcts indicates the number of high priority octets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatDpdHiPrioPkts	UINT128	tmnxPortIngQosQStatDpdHiPrioPkts	The value of tmnxPortIngQosQStatDpdHiPrioPkts indicates the number of high priority packets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatDpdLoPrioOcts	UINT128	tmnxPortIngQosQStatDpdLoPrioOcts	The value of tmnxPortIngQosQStatDpdLoPrioOcts indicates the number of low priority octets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatDpdLoPrioPkts	UINT128	tmnxPortIngQosQStatDpdLoPrioPkts	The value of tmnxPortIngQosQStatDpdLoPrioPkts indicates the number of low priority packets, as determined by the port ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
portIngQosQStatFwdInProfOcts	UINT128	tmnxPortIngQosQStatFwdInProfOcts	The value of tmnxPortIngQosQStatFwdInProfOcts indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
portIngQosQStatFwdInProfPkts	UINT128	tmnxPortIngQosQStatFwdInProfPkts	The value of tmnxPortIngQosQStatFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
portIngQosQStatFwdOutProfOcts	UINT128	tmnxPortIngQosQStatFwdOutProfOcts	The value of tmnxPortIngQosQStatFwdOutProfOcts indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
portIngQosQStatFwdOutProfPkts	UINT128	tmnxPortIngQosQStatFwdOutProfPkts	The value of tmnxPortIngQosQStatFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
portIngQosQStatOffHiPrioOcts	UINT128	tmnxPortIngQosQStatOffHiPrioOcts	The value of tmnxPortIngQosQStatOffHiPrioOcts indicates the number of high priority octets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatOffHiPrioPkts	UINT128	tmnxPortIngQosQStatOffHiPrioPkts	The value of tmnxPortIngQosQStatOffHiPrioPkts indicates the number of high priority packets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatOffLoPrioOcts	UINT128	tmnxPortIngQosQStatOffLoPrioOcts	The value of tmnxPortIngQosQStatOffLoPrioOcts indicates the number of low priority octets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatOffLoPrioPkts	UINT128	tmnxPortIngQosQStatOffLoPrioPkts	The value of tmnxPortIngQosQStatOffLoPrioPkts indicates the number of low priority packets, as determined by the port ingress QoS policy, offered by the Pchip to the Qchip.
portIngQosQStatQueueId	long	tmnxPortIngQosQStatQueueId	The value of tmnxPortIngQosQStatQueueId specifies the queue-group queue ID which is used as the fourth index to the table entry.
portIngQosQStatUncolOctsOff	UINT128	tmnxPortIngQosQStatUncolOctsOff	The value of tmnxPortIngQosQStatUncolOctsOff indicates the number of uncolored octets offered to the ingress Qchip.
portIngQosQStatUncolPktsOff	UINT128	tmnxPortIngQosQStatUncolPktsOff	The value of tmnxPortIngQosQStatUncolPktsOff indicates the number of uncolored packets offered to the ingress Qchip.
PortNetEgrQueueStat MIB table name: TIMETRA-PORT-MIB.tmnxPortNetEgrQStatTable Monitored class: ethernetequipment.NetworkEgrQGroup			
portNetEgrQDroInProfOcts	UINT128	tmnxPortNetEgrQDroInProfOcts	The value of tmnxPortNetEgrQDroInProfOcts indicates the number of conforming network egress octets dropped on this port using this queue-group queue.
portNetEgrQDroInProfPkts	UINT128	tmnxPortNetEgrQDroInProfPkts	The value of tmnxPortNetEgrQDroInProfPkts indicates the number of conforming network egress packets dropped on this port using this queue-group queue.

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5620 SAM counter name	Type	MIB counter name	Description
portNetEgrQDroOutProfOcts	UINT128	tmnxPortNetEgrQDroOutProfOcts	The value of tmnxPortNetEgrQDroOutProfOcts indicates the number of exceeding network egress octets dropped on this port using this queue-group queue.
portNetEgrQDroOutProfPkts	UINT128	tmnxPortNetEgrQDroOutProfPkts	The value of tmnxPortNetEgrQDroOutProfPkts indicates the number of exceeding network egress packets dropped on this port using this queue-group queue.
portNetEgrQFwdInProfOcts	UINT128	tmnxPortNetEgrQFwdInProfOcts	The value of tmnxPortNetEgrQFwdInProfOcts indicates the number of conforming network egress octets forwarded on this port using this queue-group queue.
portNetEgrQFwdInProfPkts	UINT128	tmnxPortNetEgrQFwdInProfPkts	The value of tmnxPortNetEgrQFwdInProfPkts indicates the number of conforming network egress packets forwarded on this port using this queue-group queue.
portNetEgrQFwdOutProfOcts	UINT128	tmnxPortNetEgrQFwdOutProfOcts	The value of tmnxPortNetEgrQFwdOutProfOcts indicates the number of exceeding network egress octets forwarded on this port using this queue-group queue.
portNetEgrQFwdOutProfPkts	UINT128	tmnxPortNetEgrQFwdOutProfPkts	The value of tmnxPortNetEgrQFwdOutProfPkts indicates the number of exceeding network egress packets forwarded on this port using this queue-group queue.
portNetEgrQStatQueueId	long	tmnxPortEgrQosQStatQueueId	The value of tmnxPortEgrQosQStatQueueId specifies the queue-group queue ID which is used as the fourth index to the table entry.
QosDroppedOctetStats MIB table name: TIMETRA-PORT-MIB.tmnxPortIngrMdaQosStatTable Monitored class: equipment.PhysicalPort			
qosClassifier0DroppedOctets	UINT128	tmnxPortIngrMdaQos00StatDropOcts	tmnxPortIngrMdaQos00StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier10DroppedOctets	UINT128	tmnxPortIngrMdaQos10StatDropOcts	tmnxPortIngrMdaQos10StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier11DroppedOctets	UINT128	tmnxPortIngrMdaQos11StatDropOcts	tmnxPortIngrMdaQos11StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier12DroppedOctets	UINT128	tmnxPortIngrMdaQos12StatDropOcts	tmnxPortIngrMdaQos12StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier13DroppedOctets	UINT128	tmnxPortIngrMdaQos13StatDropOcts	tmnxPortIngrMdaQos13StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier14DroppedOctets	UINT128	tmnxPortIngrMdaQos14StatDropOcts	tmnxPortIngrMdaQos14StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier15DroppedOctets	UINT128	tmnxPortIngrMdaQos15StatDropOcts	tmnxPortIngrMdaQos15StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier1DroppedOctets	UINT128	tmnxPortIngrMdaQos01StatDropOcts	tmnxPortIngrMdaQos01StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier2DroppedOctets	UINT128	tmnxPortIngrMdaQos02StatDropOcts	tmnxPortIngrMdaQos02StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier3DroppedOctets	UINT128	tmnxPortIngrMdaQos03StatDropOcts	tmnxPortIngrMdaQos03StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier4DroppedOctets	UINT128	tmnxPortIngrMdaQos04StatDropOcts	tmnxPortIngrMdaQos04StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier5DroppedOctets	UINT128	tmnxPortIngrMdaQos05StatDropOcts	tmnxPortIngrMdaQos05StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier6DroppedOctets	UINT128	tmnxPortIngrMdaQos06StatDropOcts	tmnxPortIngrMdaQos06StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier7DroppedOctets	UINT128	tmnxPortIngrMdaQos07StatDropOcts	tmnxPortIngrMdaQos07StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier8DroppedOctets	UINT128	tmnxPortIngrMdaQos08StatDropOcts	tmnxPortIngrMdaQos08StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier9DroppedOctets	UINT128	tmnxPortIngrMdaQos09StatDropOcts	tmnxPortIngrMdaQos09StatDropOcts indicates the number of octets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
QosDroppedPacketStats MIB table name: TIMETRA-PORT-MIB.tmnxPortIngrMdaQosStatTable Monitored class: equipment.PhysicalPort			
qosClassifier0DroppedPackets	UINT128	tmnxPortIngrMdaQos00StatDropPkts	tmnxPortIngrMdaQos00StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier10DroppedPackets	UINT128	tmnxPortIngrMdaQos10StatDropPkts	tmnxPortIngrMdaQos10StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier11DroppedPackets	UINT128	tmnxPortIngrMdaQos11StatDropPkts	tmnxPortIngrMdaQos11StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier12DroppedPackets	UINT128	tmnxPortIngrMdaQos12StatDropPkts	tmnxPortIngrMdaQos12StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier13DroppedPackets	UINT128	tmnxPortIngrMdaQos13StatDropPkts	tmnxPortIngrMdaQos13StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier14DroppedPackets	UINT128	tmnxPortIngrMdaQos14StatDropPkts	tmnxPortIngrMdaQos14StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier15DroppedPackets	UINT128	tmnxPortIngrMdaQos15StatDropPkts	tmnxPortIngrMdaQos15StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier1DroppedPackets	UINT128	tmnxPortIngrMdaQos01StatDropPkts	tmnxPortIngrMdaQos01StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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5620 SAM counter name	Type	MIB counter name	Description
qosClassifier2DroppedPackets	UINT128	tmnxPortIngrMdaQos02StatDropPkts	tmnxPortIngrMdaQos02StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier3DroppedPackets	UINT128	tmnxPortIngrMdaQos03StatDropPkts	tmnxPortIngrMdaQos03StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier4DroppedPackets	UINT128	tmnxPortIngrMdaQos04StatDropPkts	tmnxPortIngrMdaQos04StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier5DroppedPackets	UINT128	tmnxPortIngrMdaQos05StatDropPkts	tmnxPortIngrMdaQos05StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier6DroppedPackets	UINT128	tmnxPortIngrMdaQos06StatDropPkts	tmnxPortIngrMdaQos06StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier7DroppedPackets	UINT128	tmnxPortIngrMdaQos07StatDropPkts	tmnxPortIngrMdaQos07StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier8DroppedPackets	UINT128	tmnxPortIngrMdaQos08StatDropPkts	tmnxPortIngrMdaQos08StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.
qosClassifier9DroppedPackets	UINT128	tmnxPortIngrMdaQos09StatDropPkts	tmnxPortIngrMdaQos09StatDropPkts indicates the number of packets dropped on the oversubscribed MDA for given Qos classifier result because of an overload condition on the MDA.

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Table I-11 fr statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: TIMETRA-PORT-MIB.tmnxFRDlcmiTable Monitored class: fr.Interface			
lmiDiscardedMessages	long	tmnxFRDlcmiDiscardedMsgs	tmnxFRDlcmiDiscardedMsgs indicates the number of times the LMI agent discarded a received message because it wasn't expecting it, the type of message was incorrect, or the contents of the message were invalid.

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5620 SAM counter name	Type	MIB counter name	Description
lmiInvalidRxSeqNumMessages	long	tmnxFRDlcmiInvRxSeqNumMsgs	tmnxFRDlcmiInvRxSeqNumMsgs indicates the number of times the LMI agent received a message with an invalid receive sequence number: i.e. a sequence number that does not match the last transmitted sequence number of the agent.
lmiRxStatusEnquiryMessages	long	tmnxFRDlcmiRxStatusEnqMsgs	tmnxFRDlcmiRxStatusEnqMsgs indicates the number of LMI Status Enquiry messages received on this Frame Relay interface.
lmiRxStatusMessages	long	tmnxFRDlcmiRxStatusMsgs	tmnxFRDlcmiRxStatusMsgs indicates the number of LMI Status messages received on this Frame Relay interface.
lmiStatusEnquiryMsgTimeouts	long	tmnxFRDlcmiStatusEnqMsgTimeouts	tmnxFRDlcmiStatusEnqMsgTimeouts indicates the number of times the LMI agent did not receive a Status Enquiry message within the allotted time.
lmiStatusMsgTimeouts	long	tmnxFRDlcmiStatusMsgTimeouts	tmnxFRDlcmiStatusMsgTimeouts indicates the number of times the LMI agent did not receive a Status message within the allotted time.
lmiTxStatusEnquiryMessages	long	tmnxFRDlcmiTxStatusEnqMsgs	tmnxFRDlcmiTxStatusEnqMsgs indicates the number of LMI Status Enquiry messages transmitted on this Frame Relay interface.
lmiTxStatusMessages	long	tmnxFRDlcmiTxStatusMsgs	tmnxFRDlcmiTxStatusMsgs indicates the number of LMI Status messages transmitted on this Frame Relay interface.

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Table I-12 gsmp statistics

5620 SAM counter name	Type	MIB counter name	Description
GsmpSessionStats MIB table name: TIMETRA-GSMP-MIB.tmnxAncpSessionStatsTable Monitored class: gsmp.GsmpGroupNeighborSession			
ancpAckReceived	long	tmnxAncpSesStatRxAck	The value of tmnxAncpSesStatRxAck indicates the number of GSMP ACK messages received in this ANCP session.
ancpAckTransmitted	long	tmnxAncpSesStatTxAck	The value of tmnxAncpSesStatTxAck indicates the number of GSMP ACK messages that were transmitted to the ANCP neighbor in this ANCP session.
ancpLoopBackReceived	long	tmnxAncpSesStatRxLoopback	The value of tmnxAncpSesStatRxLoopback indicates the number of GSMP Loopback messages received in this ANCP session.
ancpLoopBackTransmitted	long	tmnxAncpSesStatTxLoopback	The value of tmnxAncpSesStatTxLoopback indicates the number of GSMP Loopback messages that were transmitted to the ANCP neighbor in this ANCP session.

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5620 SAM counter name	Type	MIB counter name	Description
ancpPortDownReceived	long	tmnxAncpSesStatRxPortDown	The value of tmnxAncpSesStatRxPortDown indicates the number of GSMP 'PortDown' messages received in this ANCP session.
ancpPortDownTransmitted	long	tmnxAncpSesStatTxPortDown	The value of tmnxAncpSesStatTxPortDown indicates the number of GSMP 'PortDown' messages that were transmitted to the ANCP neighbor in this session.
ancpPortUpReceived	long	tmnxAncpSesStatRxPortUp	The value of tmnxAncpSesStatRxPortUp indicates the number of GSMP 'PortUp' messages received in this ANCP session.
ancpPortUpTransmitted	long	tmnxAncpSesStatTxPortUp	The value of tmnxAncpSesStatTxPortUp indicates the number of GSMP 'PortUp' messages that were transmitted to the ANCP neighbor in this session.
ancpRstAckReceived	long	tmnxAncpSesStatRxRstAck	The value of tmnxAncpSesStatRxRstAck indicates the number of GSMP RST ACK messages received in this ANCP session.
ancpRstAckTransmitted	long	tmnxAncpSesStatTxRstAck	The value of tmnxAncpSesStatTxRstAck indicates the number of GSMP RST ACK messages that were transmitted to the ANCP neighbor in this session.
ancpSynAckReceived	long	tmnxAncpSesStatRxSynAck	The value of tmnxAncpSesStatRxSynAck indicates the number of GSMP SYN ACK messages received in this ANCP session.
ancpSynAckTransmitted	long	tmnxAncpSesStatTxSynAck	The value of tmnxAncpSesStatTxSynAck indicates the number of GSMP SYN ACK messages that were transmitted to the ANCP neighbor in this ANCP session.
ancpSynReceived	long	tmnxAncpSesStatRxSyn	The value of tmnxAncpSesStatRxSyn indicates the number of GSMP SYN messages received in this ANCP session.
ancpSynTransmitted	long	tmnxAncpSesStatTxSyn	The value of tmnxAncpSesStatTxSyn indicates the number of GSMP SYN messages that were transmitted to the ANCP neighbor in this ANCP session.
ancpTransmittedDropped	long	tmnxAncpSesStatTxDrop	The value of tmnxAncpSesStatTxDrop indicates the number of GSMP protocol messages that were created by the system in order for them to be sent to the ACNP neighbor, but were never transmitted.

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Table I-13 igmp statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: TIMETRA-IGMP-MIB.vRtrIgmpIfStatsTable Monitored class: igmp.Interface			

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5620 SAM counter name	Type	MIB counter name	Description
importPolicyDrops	long	vRtrIgmpIfImportPolicyDrops	The value of vRtrIgmpIfImportPolicyDrops indicates the total number of times IGMP protocol instance matched the host IP address or group/source addresses specified in the import policy vRtrIgmpIfImportPolicy.
mcacPolicyDrops	long	vRtrIgmpIfStatsMcacPolicyDrops	The value of the object vRtrIgmpIfStatsMcacPolicyDrops indicates the number times an IGMP Group is dropped because of applying a multicast CAC policy on this interface.
rxBadChecksumPkts	long	vRtrIgmpIfRxBadChecksumPkts	The value of vRtrIgmpIfRxBadChecksumPkts indicates the total number of IGMP packets with bad checksum received on this interface.
rxBadEncodings	long	vRtrIgmpIfRxBadEncodings	The value of vRtrIgmpIfRxBadEncodings indicates the total number of IGMP packets received on this interface which were not encoded correctly.
rxBadLenPkts	long	vRtrIgmpIfRxBadLenPkts	The value of vRtrIgmpIfRxBadLenPkts indicates the total number of IGMP packets with bad length received on this interface.
rxBadReceiveIfPkts	long	vRtrIgmpIfRxBadReceiveIfPkts	The value of vRtrIgmpIfRxBadReceiveIfPkts indicates the total number of IGMP packets incorrectly received on this interface.
rxGenQueries	long	vRtrIgmpIfRxGenQueries	The value of vRtrIgmpIfRxGenQueries indicates the total number of IGMP General Queries received on this interface.
rxGrpQueries	long	vRtrIgmpIfRxGrpQueries	The value of vRtrIgmpIfRxGrpQueries indicates the number of IGMP Group Specific Queries received on this interface.
rxGrpSrcQueries	long	vRtrIgmpIfRxGrpSrcQueries	The value of vRtrIgmpIfRxGrpSrcQueries indicates the number of IGMP Group and Source Specific Queries received on this interface.
rxLeaves	long	vRtrIgmpIfRxLeaves	The value of vRtrIgmpIfRxLeaves indicates the total number of IGMP V2 Leaves received on this interface.
rxNonLocal	long	vRtrIgmpIfRxNonLocal	The value of vRtrIgmpIfRxNonLocal indicates the total number of IGMP packets received from a non-local sender.
rxNoRtrAlertPkts	long	vRtrIgmpIfRxNoRtrAlertPkts	The value of vRtrIgmpIfRxNoRtrAlertPkts indicates the total number of IGMPv3 packets received on this interface which did not have the router alert flag set.
rxPktDrops	long	vRtrIgmpIfRxPktDrops	The value of vRtrIgmpIfRxPktDrops indicates the total number of IGMP packets that were received on this interface but were dropped.

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5620 SAM counter name	Type	MIB counter name	Description
rxUnknownTypePkts	long	vRtrIgmpIfRxUnknownTypePkts	The value of vRtrIgmpIfRxUnknownTypePkts indicates the total number of IGMP packets with unknown type received on this interface.
rxV1Reports	long	vRtrIgmpIfRxV1Reports	The value of vRtrIgmpIfRxV1Reports indicates the total number of IGMP V1 Reports received on this interface.
rxV2Reports	long	vRtrIgmpIfRxV2Reports	The value of vRtrIgmpIfRxV2Reports indicates the total number of IGMP V2 Reports received on this interface.
rxV3Reports	long	vRtrIgmpIfRxV3Reports	The value of vRtrIgmpIfRxV3Reports indicates the total number of IGMP V3 Reports received on this interface.
rxWrongVersions	long	vRtrIgmpIfRxWrongVersions	The value of vRtrIgmpIfRxWrongVersions indicates the total number of IGMP packets with wrong versions received on this interface.
statsSGTypes	long	vRtrIgmpIfStatsSGTypes	The value of vRtrIgmpIfStatsSGTypes indicates the number of entries on this interface for which the source type is 'sg'.
statsStarGTypes	long	vRtrIgmpIfStatsStarGTypes	vRtrIgmpIfStatsStarGTypes indicates the number of entries on this interface for which the source type is 'starG'.
txErrors	long	vRtrIgmpIfTxErrors	The value of vRtrIgmpIfTxErrors indicates the total number of times there was an error transmitting IGMP packets on this interface..
txGenQueries	long	vRtrIgmpIfTxGenQueries	The value of vRtrIgmpIfTxGenQueries indicates the number of IGMP General Queries transmitted on this interface.
txGrpQueries	long	vRtrIgmpIfTxGrpQueries	The value of vRtrIgmpIfTxGrpQueries indicates the number of IGMP Group Specific Queries transmitted on this interface.
txGrpSrcQueries	long	vRtrIgmpIfTxGrpSrcQueries	The value of vRtrIgmpIfTxGrpSrcQueries indicates the number of IGMP Group and Source Specific Queries transmitted on this interface.
txLeaves	long	vRtrIgmpIfTxLeaves	The value of vRtrIgmpIfTxLeaves indicates the total number of IGMP Leaves transmitted on this interface.
txV1Reports	long	vRtrIgmpIfTxV1Reports	The value of vRtrIgmpIfTxV1Reports indicates the total number of IGMP V1 Reports transmitted on this interface.
txV2Reports	long	vRtrIgmpIfTxV2Reports	The value of vRtrIgmpIfTxV2Reports indicates the total number of IGMP V2 Reports transmitted on this interface.
txV3Reports	long	vRtrIgmpIfTxV3Reports	The value of vRtrIgmpIfTxV3Reports indicates the total number of IGMP V3 Reports transmitted on this interface.
InterfaceStatsExtension MIB table name: TIMETRA-IGMP-MIB.vRtrIgmpIfStatsTable Monitored class: igmp.Interface			

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5620 SAM counter name	Type	MIB counter name	Description
rxLocalScopePkts	long	vRtrIgmpIfRxLocalScopePkts	The value of the object vRtrIgmpIfRxLocalScopePkts indicates the number of IGMP packets received on the link-local scope IPv4 multicast address.
rxRsvdScopePkts	long	vRtrIgmpIfRxRsvdScopePkts	The value of the object vRtrIgmpIfRxRsvdScopePkts indicates the number of IGMP packets received on the reserved scope IPv4 multicast address.

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Table I-14 ipsec statistics

5620 SAM counter name	Type	MIB counter name	Description
IPSecSAStats MIB table name: TIMETRA-IPSEC-MIB.tmnxIPsecSAStatsTable Monitored class: ipsec.IPSecSecurityAssociation			
bytesProcessed	UINT128	tmnxIPsecSAStatsBytesProcessed	The value of tmnxIPsecSAStatsBytesProcessed indicates the number of bytes successfully processed for this SA.
cryptoErrors	long	tmnxIPsecSAStatsCryptoErrors	The value of tmnxIPsecSAStatsCryptoErrors indicates the number of crypto errors encountered on this SA. The crypto errors include errors on packets where protocol does not match or if the check on authentication header length failed.
pktsProcessed	UINT128	tmnxIPsecSAStatsPktsProcessed	The value of tmnxIPsecSAStatsPktsProcessed indicates the number of packets successfully processed for this SA.
policyErrors	long	tmnxIPsecSAStatsPolicyErrors	The value of tmnxIPsecSAStatsPolicyErrors indicates the number of policy errors encountered on this SA. The policy errors include bundled SA, selector check and policy direction error.
replayErrors	long	tmnxIPsecSAStatsReplayErrors	The value of tmnxIPsecSAStatsReplayErrors indicates the number of replay errors encountered on this SA.
saErrors	long	tmnxIPsecSAStatsSAErrors	The value of tmnxIPsecSAStatsSAErrors indicates the number of SA errors encountered on this SA. The SA errors include sequence number failure, invalid SA, ploicy version mismatch, illegal authentication algorithm, expanded packet too big, illegal configured algorithm and ttl decrement error.
IPSecTunnelStats MIB table name: TIMETRA-IPSEC-MIB.tmnxIPsecTunnelStatsTable Monitored class: ipsec.IPSecTunnel			

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5620 SAM counter name	Type	MIB counter name	Description
isakmpEstabTime	long	tmnxIPsecTunnelIsakmpEstabTime	The value of tmnxIPsecTunnelIsakmpEstabTime indicates the sysUpTime at the time the IPsec phase 1 negotiation completed.
isakmpNegLifeTime	long	tmnxIPsecTunnelIsakmpNegLifeTime	The value of tmnxIPsecTunnelIsakmpNegLifeTime indicates the lifetime negotiated for phase1 Ike key.
isakmpState	long	tmnxIPsecTunnelIsakmpState	The value of tmnxIPsecTunnelIsakmpState indicates the state of phase 1 IPsec negotiation.
numCtrlPktsRx	long	tmnxIPsecTunnelNumCtrlPktsRx	The value of tmnxIPsecTunnelNumCtrlPktsRx indicates the number of control packets this IPsec Tunnel has received.
numCtrlPktsTx	long	tmnxIPsecTunnelNumCtrlPktsTx	The value of tmnxIPsecTunnelNumCtrlPktsTx indicates the number of control packets this IPsec Tunnel has sent.
numCtrlRxErrors	long	tmnxIPsecTunnelNumCtrlRxErrors	The value of tmnxIPsecTunnelNumCtrlRxErrors indicates the number of control packet receive errors.
numCtrlTxErrors	long	tmnxIPsecTunnelNumCtrlTxErrors	The value of tmnxIPsecTunnelNumCtrlTxErrors indicates the number of control packet transmit errors.
numDpdAckRx	long	tmnxIPsecTunnelNumDpdAckRx	The value of tmnxIPsecTunnelNumDpdAckRx indicates the number of Dead-Peer-Detection acknowledgement packets received.
numDpdAckTx	long	tmnxIPsecTunnelNumDpdAckTx	The value of tmnxIPsecTunnelNumDpdAckTx indicates the number of Dead-Peer-Detection acknowledgement packets transmitted.
numDpdRx	long	tmnxIPsecTunnelNumDpdRx	The value of tmnxIPsecTunnelNumDpdRx indicates the number of Dead-Peer-Detection packets received.
numDpdTx	long	tmnxIPsecTunnelNumDpdTx	The value of tmnxIPsecTunnelNumDpdTx indicates the number of Dead-Peer-Detection packets transmitted.
numExpRx	long	tmnxIPsecTunnelNumExpRx	The value of tmnxIPsecTunnelNumExpRx indicates the number of DPD R-U-THERE packets that have not been acknowledged.
numInvalidDpdRx	long	tmnxIPsecTunnelNumInvalidDpdRx	The value of tmnxIPsecTunnelNumInvalidDpdRx indicates the number of malformed DPD R-U-THERE acknowledgement packets received.

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Table I-15 isa statistics

5620 SAM counter name	Type	MIB counter name	Description
AaGroupEgrQStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxGrpStatusEgrQTable Monitored class: isa.AaEgrQueue			
droInProfOcts	long	tmnxBsxGrpStatusEgrQDroInPOcts	The value of tmnxBsxGrpStatusEgrQDroInPOcts indicates the number of in profile bytes discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
droInProfPkts	long	tmnxBsxGrpStatusEgrQDroInPPkts	The value of tmnxBsxGrpStatusEgrQDroInPPkts indicates the number of in profile packets discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
droOutProfOcts	long	tmnxBsxGrpStatusEgrQDroOutPOcts	The value of tmnxBsxGrpStatusEgrQDroOutPOcts indicates the number of out of profile bytes discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
droOutProfPkts	long	tmnxBsxGrpStatusEgrQDroOutPPkts	The value of tmnxBsxGrpStatusEgrQDroOutPPkts indicates the number of out of profile packets discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
fwdInProfOcts	long	tmnxBsxGrpStatusEgrQFwdInPOcts	The value of tmnxBsxGrpStatusEgrQFwdInPOcts indicates the number of in profile bytes diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
fwdInProfPkts	long	tmnxBsxGrpStatusEgrQFwdInPPkts	The value of tmnxBsxGrpStatusEgrQFwdInPPkts indicates the number of in profile packets diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
fwdOutProfOcts	long	tmnxBsxGrpStatusEgrQFwdOutPOcts	The value of tmnxBsxGrpStatusEgrQFwdOutPOcts indicates the number of out of profile bytes diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
fwdOutProfPkts	long	tmnxBsxGrpStatusEgrQFwdOutPPkts	The value of tmnxBsxGrpStatusEgrQFwdOutPPkts indicates the number of out of profile packets diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.

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5620 SAM counter name	Type	MIB counter name	Description
hCDroInProfOcts	UINT128	tmnxBsxGrpStatusEgrQHCDroInPOcts	The value of tmnxBsxGrpStatusEgrQHCDroInPOcts indicates the number of in profile bytes discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCDroInProfPkts	UINT128	tmnxBsxGrpStatusEgrQHCDroInPPkts	The value of tmnxBsxGrpStatusEgrQHCDroInPPkts indicates the number of in profile packets discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCDroOutProfOcts	UINT128	tmnxBsxGrpStatusEgrQHCDroOutPOcts	The value of tmnxBsxGrpStatusEgrQHCDroOutPOcts indicates the number of out of profile bytes discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCDroOutProfPkts	UINT128	tmnxBsxGrpStatusEgrQHCDroOutPPkts	The value of tmnxBsxGrpStatusEgrQHCDroOutPPkts indicates the number of out of profile packets discarded from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCFwdInProfOcts	UINT128	tmnxBsxGrpStatusEgrQHCFwdInPOcts	The value of tmnxBsxGrpStatusEgrQHCFwdInPOcts indicates the number of in profile bytes diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCFwdInProfPkts	UINT128	tmnxBsxGrpStatusEgrQHCFwdInPPkts	The value of tmnxBsxGrpStatusEgrQHCFwdInPPkts indicates the number of in profile packets diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCFwdOutProfOcts	UINT128	tmnxBsxGrpStatusEgrQHCFwdOutPOcts	The value of tmnxBsxGrpStatusEgrQHCFwdOutPOcts indicates the number of out of profile bytes diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
hCFwdOutProfPkts	UINT128	tmnxBsxGrpStatusEgrQHCFwdOutPPkts	The value of tmnxBsxGrpStatusEgrQHCFwdOutPPkts indicates the number of out of profile packets diverted from ingress IOMs towards the ISA-AA MDA within this group for the particular queue.
AaGroupIngQStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxGrpStatusIngQTable Monitored class: isa.AaIngQueue			
droInProfOcts	long	tmnxBsxGrpStatusIngQDroInPOcts	The value of tmnxBsxGrpStatusIngQDroInPOcts indicates the number of in profile bytes discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.

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5620 SAM counter name	Type	MIB counter name	Description
droInProfPkts	long	tmnxBsxGrpStatusIngQDroInPPkts	The value of tmnxBsxGrpStatusIngQDroInPPkts indicates the number of in profile packets discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
droOutProfOcts	long	tmnxBsxGrpStatusIngQDroOutPOcts	The value of tmnxBsxGrpStatusIngQDroOutPOcts indicates the number of out of profile bytes discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
droOutProfPkts	long	tmnxBsxGrpStatusIngQDroOutPPkts	The value of tmnxBsxGrpStatusIngQDroOutPPkts indicates the number of out of profile packets discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
fwdInProfOcts	long	tmnxBsxGrpStatusIngQFwdInPOcts	The value of tmnxBsxGrpStatusIngQFwdInPOcts indicates the number of in profile bytes diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
fwdInProfPkts	long	tmnxBsxGrpStatusIngQFwdInPPkts	The value of tmnxBsxGrpStatusIngQFwdInPPkts indicates the number of in profile packets diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
fwdOutProfOcts	long	tmnxBsxGrpStatusIngQFwdOutPOcts	The value of tmnxBsxGrpStatusIngQFwdOutPOcts indicates the number of out of profile bytes diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
fwdOutProfPkts	long	tmnxBsxGrpStatusIngQFwdOutPPkts	The value of tmnxBsxGrpStatusIngQFwdOutPPkts indicates the number of out of profile packets diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCDroInProfOcts	UINT128	tmnxBsxGrpStatusIngQHCDroInPOcts	The value of tmnxBsxGrpStatusIngQHCDroInPOcts indicates the number of in profile bytes discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCDroInProfPkts	UINT128	tmnxBsxGrpStatusIngQHCDroInPPkts	The value of tmnxBsxGrpStatusIngQHCDroInPPkts indicates the number of in profile packets discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.

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5620 SAM counter name	Type	MIB counter name	Description
hCDroOutProfOcts	UINT128	tmnxBsxGrpStatusIngQHCDroOutPOcts	The value of tmnxBsxGrpStatusIngQHCDroOutPOcts indicates the number of out of profile bytes discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCDroOutProfPkts	UINT128	tmnxBsxGrpStatusIngQHCDroOutPPkts	The value of tmnxBsxGrpStatusIngQHCDroOutPPkts indicates the number of out of profile packets discarded towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCFwdInProfOcts	UINT128	tmnxBsxGrpStatusIngQHCFwdInPOcts	The value of tmnxBsxGrpStatusIngQHCFwdInPOcts indicates the number of in profile bytes diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCFwdInProfPkts	UINT128	tmnxBsxGrpStatusIngQHCFwdInPPkts	The value of tmnxBsxGrpStatusIngQHCFwdInPPkts indicates the number of in profile packets diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCFwdOutProfOcts	UINT128	tmnxBsxGrpStatusIngQHCFwdOutPOcts	The value of tmnxBsxGrpStatusIngQHCFwdOutPOcts indicates the number of out of profile bytes diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
hCFwdOutProfPkts	UINT128	tmnxBsxGrpStatusIngQHCFwdOutPPkts	The value of tmnxBsxGrpStatusIngQHCFwdOutPPkts indicates the number of out of profile packets diverted towards egress IOMs from the ISA-AA MDA within this group for the particular queue.
AaSapSumStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxAaSubSumTable Monitored class: isa.AaSapInfo			
aaSap	String	tmnxBsxAaSubscriber	The Application Assurance Subscriber identifier. The format of this object is determined by the value of the tmnxBsxAaSubscriberType.
AaSubSumStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxAaSubSumTable Monitored class: isa.AaSubInfo			
aaSubscriber	String	tmnxBsxAaSubscriber	The Application Assurance Subscriber identifier. The format of this object is determined by the value of the tmnxBsxAaSubscriberType.
BsxMdaStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxGrpStatusTable Monitored classes: • equipment.Shelf • equipment.DaughterCardSlot			

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5620 SAM counter name	Type	MIB counter name	Description
flows	long	tmnxBsxGrpStatusFlows	The value of tmnxBsxGrpStatusFlows indicates the number of flows seen by the ISA-AA MDA(s). Note that if the same 5-tuple is seen for a different flow within the flow timeout, it will still be considered one flow.
flowsCurrent	long	tmnxBsxGrpStatusFlowsCurrent	The value of tmnxBsxGrpStatusFlowsCurrent indicates the number of flows currently being tracked by the ISA-AA MDA(s).
flowSetupRate	long	tmnxBsxGrpStatusFlowSetupRate	The value of tmnxBsxGrpStatusFlowSetupRate indicates the number of flow setups per second. The calculation is weighted to give half of the weight to flows setup within the last five minutes and 25 weighting to flows setup in the previous five minutes, etc.
hCFlows	UINT128	tmnxBsxGrpStatusHCFlows	The value of tmnxBsxGrpStatusHCFlows indicates the number of flows seen by the ISA-AA MDA(s). Note that if the same 5-tuple is seen for a different flow within the flow timeout, it will still be considered one flow.
hCOctsDiscCongIn	UINT128	tmnxBsxGrpStatusHCOctsDiscCongIn	The value of tmnxBsxGrpStatusHCOctsDiscCongIn indicates the number of bytes discarded by the IOMs prior to the ISA-AA MDA(s) due to egress IOM congestion.
hCOctsDiscCongMda	UINT128	tmnxBsxGrpStatusHCOctsDisCongMda	The value of tmnxBsxGrpStatusHCOctsDisCongMda indicates the number of bytes discarded by the ISA-AA MDA(s) due to congestion.
hCOctsDiscCongOut	UINT128	tmnxBsxGrpStatusHCOctsDisCongOut	The value of tmnxBsxGrpStatusHCOctsDisCongOut indicates the number of bytes discarded by the IOMs after the ISA-AA MDA(s) due to ingress IOM congestion.
hCOctsDiscErrors	UINT128	tmnxBsxGrpStatusHCOctsDiscErrors	The value of tmnxBsxGrpStatusHCOctsDiscErrors indicates the number of bytes discarded due to unrecoverable errors.
hCOctsDiscPolicy	UINT128	tmnxBsxGrpStatusHCOctsDiscPolicy	The value of tmnxBsxGrpStatusHCOctsDiscPolicy indicates the number of bytes discarded by the ISA-AA MDA(s) due to policy policers or discard actions.
hCOctsFromMda	UINT128	tmnxBsxGrpStatusHCOctsFromMda	The value of tmnxBsxGrpStatusHCOctsFromMda indicates the number of bytes sent from the ISA-AA MDA(s) to the local IOM.
hCOctsIn	UINT128	tmnxBsxGrpStatusHCOctsIn	The value of tmnxBsxGrpStatusHCOctsIn indicates the number of bytes diverted from ingress IOMs towards the ISA-AA MDA(s).

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5620 SAM counter name	Type	MIB counter name	Description
hCOctsInMda	UINT128	tmnxBsxGrpStatusHCOctsInMda	The value of tmnxBsxGrpStatusHCOctsInMda indicates the number of bytes buffered by the ISA-AA MDA(s).
hCOctsInspected	UINT128	tmnxBsxGrpStatusHCOctsInspected	The value of tmnxBsxGrpStatusHCOctsInspected indicates the number of bytes sent for protocol determination by the ISA-AA MDA(s).
hCOctsOut	UINT128	tmnxBsxGrpStatusHCOctsOut	The value of tmnxBsxGrpStatusHCOctsOut indicates the number of bytes sent to egress IOMs from the ISA-AA MDA(s).
hCOctsPolicyByPass	UINT128	tmnxBsxGrpStatusHCOctsPolicyByps	The value of tmnxBsxGrpStatusHCOctsPolicyByps indicates the number of bytes passed untouched that did not have statistics or policy applied.
hCOctsToMda	UINT128	tmnxBsxGrpStatusHCOctsToMda	The value of tmnxBsxGrpStatusHCOctsToMda indicates the number of bytes sent from an IOM towards the ISA-AA MDA(s).
hCPktsDiscCongIn	UINT128	tmnxBsxGrpStatusHCPktsDiscCongIn	The value of tmnxBsxGrpStatusHCPktsDiscCongIn indicates the number of packets discarded by the IOMs prior to the ISA-AA MDA(s) due to egress IOM congestion.
hCPktsDiscCongMda	UINT128	tmnxBsxGrpStatusHCPktsDisCongMda	The value of tmnxBsxGrpStatusHCPktsDisCongMda indicates the number of packets discarded by the ISA-AA MDA(s) due to congestion.
hCPktsDiscCongOut	UINT128	tmnxBsxGrpStatusHCPktsDisCongOut	The value of tmnxBsxGrpStatusHCPktsDisCongOut indicates the number of packets discarded by the IOMs after the ISA-AA MDA(s) due to ingress IOM congestion.
hCPktsDiscErrors	UINT128	tmnxBsxGrpStatusHCPktsDiscErrors	The value of tmnxBsxGrpStatusHCPktsDiscErrors indicates the number of packets discarded due to unrecoverable errors.
hCPktsDiscPolicy	UINT128	tmnxBsxGrpStatusHCPktsDiscPolicy	The value of tmnxBsxGrpStatusHCPktsDiscPolicy indicates the number of packets discarded by the ISA-AA MDA(s) due to policy policers or discard actions.
hCPktsFromMda	UINT128	tmnxBsxGrpStatusHCPktsFromMda	The value of tmnxBsxGrpStatusHCPktsFromMda indicates the number of packets sent from the ISA-AA MDA(s) to the local IOM.
hCPktsIn	UINT128	tmnxBsxGrpStatusHCPktsIn	The value of tmnxBsxGrpStatusHCPktsIn indicates the number of packets diverted from ingress IOMs towards the ISA-AA MDA(s).

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5620 SAM counter name	Type	MIB counter name	Description
hCPktsInMda	UINT128	tmnxBsxGrpStatusHCPktsInMda	The value of tmnxBsxGrpStatusHCPktsInMda indicates the number of packets buffered by the ISA-AA MDA(s).
hCPktsInPchipErrors	UINT128	tmnxBsxGrpStatusHCPktsInPChipErs	The value of tmnxBsxGrpStatusHCPktsInPChipErs indicates the number of packets discarded by the egress P-chip due to errors in the packets.
hCPktsInspected	UINT128	tmnxBsxGrpStatusHCPktsInspected	The value of tmnxBsxGrpStatusHCPktsInspected indicates the number of packets sent for protocol determination by the ISA-AA MDA(s).
hCPktsOut	UINT128	tmnxBsxGrpStatusHCPktsOut	The value of tmnxBsxGrpStatusHCPktsOut indicates the number of packets sent to egress IOMs from the ISA-AA MDA(s).
hCPktsOutPchipErrors	UINT128	tmnxBsxGrpStatusHCPktsOutPChipEr	The value of tmnxBsxGrpStatusHCPktsOutPChipEr indicates the number of packets discarded by the ingress P-chip due to errors in the packets.
hCPktsPolicyByPass	UINT128	tmnxBsxGrpStatusHCPktsPolicyByps	The value of tmnxBsxGrpStatusHCPktsPolicyByps indicates the number of packets passed untouched that did not have statistics or policy applied.
hCPktsToMda	UINT128	tmnxBsxGrpStatusHCPktsToMda	The value of tmnxBsxGrpStatusHCPktsToMda indicates the number of packets sent from an IOM towards the ISA-AA MDA(s).
octsDiscCongIn	long	tmnxBsxGrpStatusOctsDiscCongIn	The value of tmnxBsxGrpStatusOctsDiscCongIn indicates the number of bytes discarded by the IOMs prior to the ISA-AA MDA(s) due to egress IOM congestion.
octsDiscCongMda	long	tmnxBsxGrpStatusOctsDisCongMda	The value of tmnxBsxGrpStatusOctsDisCongMda indicates the number of bytes discarded by the ISA-AA MDA(s) due to congestion.
octsDiscCongOut	long	tmnxBsxGrpStatusOctsDisCongOut	The value of tmnxBsxGrpStatusOctsDisCongOut indicates the number of bytes discarded by the IOMs after the ISA-AA MDA(s) due to ingress IOM congestion.
octsDiscErrors	long	tmnxBsxGrpStatusOctsDiscErrors	The value of tmnxBsxGrpStatusOctsDiscErrors indicates the number of bytes discarded due to unrecoverable errors.
octsDiscPolicy	long	tmnxBsxGrpStatusOctsDiscPolicy	The value of tmnxBsxGrpStatusOctsDiscPolicy indicates the number of bytes discarded by the ISA-AA MDA(s) due to policy.

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5620 SAM counter name	Type	MIB counter name	Description
octsFromMda	long	tmnxBsxGrpStatusOctsFromMda	The value of tmnxBsxGrpStatusOctsFromMda indicates the number of bytes sent from the ISA-AA MDA(s) to the local IOM.
octsIn	long	tmnxBsxGrpStatusOctsIn	The value of tmnxBsxGrpStatusOctsIn indicates the number of bytes diverted from ingress IOMs towards the ISA-AA MDA(s).
octsInMda	long	tmnxBsxGrpStatusOctsInMda	The value of tmnxBsxGrpStatusOctsInMda indicates the number of bytes buffered by the ISA-AA MDA(s).
octsInspected	long	tmnxBsxGrpStatusOctsInspected	The value of tmnxBsxGrpStatusOctsInspected indicates the number of bytes sent for protocol determination by the ISA-AA MDA(s).
octsOut	long	tmnxBsxGrpStatusOctsOut	The value of tmnxBsxGrpStatusOctsOut indicates the number of bytes sent to egress IOMs from the ISA-AA MDA(s).
octsPolicyByPass	long	tmnxBsxGrpStatusOctsPolicyByps	The value of tmnxBsxGrpStatusOctsPolicyByps indicates the number of bytes passed untouched that did not have statistics or policy applied.
octsToMda	long	tmnxBsxGrpStatusOctsToMda	The value of tmnxBsxGrpStatusOctsToMda indicates the number of bytes sent from an IOM towards the ISA-AA MDA(s).
pktsDiscCongIn	long	tmnxBsxGrpStatusPktsDiscCongIn	The value of tmnxBsxGrpStatusPktsDiscCongIn indicates the number of packets discarded by the IOMs prior to the ISA-AA MDA(s) due to egress IOM congestion.
pktsDiscCongMda	long	tmnxBsxGrpStatusPktsDisCongMda	The value of tmnxBsxGrpStatusPktsDisCongMda indicates the number of packets discarded by the ISA-AA MDA(s) due to congestion.
pktsDiscCongOut	long	tmnxBsxGrpStatusPktsDisCongOut	The value of tmnxBsxGrpStatusPktsDisCongOut indicates the number of packets discarded by the IOMs after the ISA-AA MDA(s) due to ingress IOM congestion.
pktsDiscErrors	long	tmnxBsxGrpStatusPktsDiscErrors	The value of tmnxBsxGrpStatusPktsDiscErrors indicates the number of packets discarded due to unrecoverable errors.
pktsDiscPolicy	long	tmnxBsxGrpStatusPktsDiscPolicy	The value of tmnxBsxGrpStatusPktsDiscPolicy indicates the number of packets discarded by the ISA-AA MDA(s) due to policy.
pktsFromMda	long	tmnxBsxGrpStatusPktsFromMda	The value of tmnxBsxGrpStatusPktsFromMda indicates the number of packets sent from the ISA-AA MDA(s) to the local IOM.

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5620 SAM counter name	Type	MIB counter name	Description
pktsIn	long	tmnxBsxGrpStatusPktsIn	The value of tmnxBsxGrpStatusPktsIn indicates the number of packets diverted from ingress IOMs towards the ISA-AA MDA(s).
pktsInMda	long	tmnxBsxGrpStatusPktsInMda	The value of tmnxBsxGrpStatusPktsInMda indicates the number of packets buffered by the ISA-AA MDA(s).
pktsInPChipErrors	long	tmnxBsxGrpStatusPktsInPChipErs	The value of tmnxBsxGrpStatusPktsInPChipErs indicates the number of packets discarded by the egress P-chip due to errors in the packets.
pktsInspected	long	tmnxBsxGrpStatusPktsInspected	The value of tmnxBsxGrpStatusPktsInspected indicates the number of packets sent for protocol determination by the ISA-AA MDA(s).
pktsOut	long	tmnxBsxGrpStatusPktsOut	The value of tmnxBsxGrpStatusPktsOut indicates the number of packets sent to egress IOMs from the ISA-AA MDA(s).
pktsOutPChipErrors	long	tmnxBsxGrpStatusPktsOutPChipEr	The value of tmnxBsxGrpStatusPktsOutPChipEr indicates the number of packets discarded by the ingress P-chip due to errors in the packets.
pktsPolicyByPass	long	tmnxBsxGrpStatusPktsPolicyByps	The value of tmnxBsxGrpStatusPktsPolicyByps indicates the number of packets passed untouched that did not have statistics or policy applied.
pktsToMda	long	tmnxBsxGrpStatusPktsToMda	The value of tmnxBsxGrpStatusPktsToMda indicates the number of packets sent from an IOM towards the ISA-AA MDA(s).
subsCurrent	long	tmnxBsxGrpStatusSubsCurrent	The value of tmnxBsxGrpStatusSubsCurrent indicates the number of subscribers currently with flow records in the ISA-AA MDA(s).
subsDiverted	long	tmnxBsxGrpStatusSubsDiverted	The value of tmnxBsxGrpStatusSubsDiverted indicates the number of subscribers defined in TIMETRA-SUBSCRIBER-MGMT-MIB::tmnxSubInfoAppProfile in the tmnxSubscriberInfoTable with tmnxBsxAppProfDivert set to 'true'.
trafficRate	long	tmnxBsxGrpStatusTrafficRate	The value of tmnxBsxGrpStatusTrafficRate indicates the traffic rate in kilo-bits per second (kbps) incoming to the ISA-AA MDA(s).
VideoGroupMemberStats MIB table name: TIMETRA-VIDEO-MIB.tmnxVdoGrpMDATable Monitored class: isa.VideoGroupMember			
vdoGrpMdaActiveRtcpSessions	long	tmnxVdoGrpMdaActiveRtcpSessions	The value of tmnxVdoGrpMdaActiveRtcpSessions indicates the number of active Real Time Transport Control Protocol (RTCP) sessions on this MDA.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpMdaAdStreamAborts	long	tmnxVdoGrpMdaAdStreamAborts	The value of tmnxVdoGrpMdaAdStreamAborts indicates the number of ad stream aborts on this MDA. An ad stream abort could happen when an egress reset happens.
vdoGrpMdaAdStreamResets	long	tmnxVdoGrpMdaAdStreamResets	The value of tmnxVdoGrpMdaAdStreamResets indicates the number of ad stream resets on this MDA. An ad stream reset occurs when the ingress ad stream stops.
vdoGrpMdaAvailableMemory	long	tmnxVdoGrpMdaAvailableMemory	The value of tmnxVdoGrpMdaAvailableMemory indicates the amount of cache available on the MDA for storing the video stream.
vdoGrpMdaBwInUse	long	tmnxVdoGrpMdaBwInUse	The value of tmnxVdoGrpMdaBwInUse indicates the total aggregate bandwidth of the currently running egress streams.
vdoGrpMdaChannelAllocFails	long	tmnxVdoGrpMdaChannelAllocFails	The value of tmnxVdoGrpMdaChannelAllocFails indicates the number of failed channel allocations on this MDA.
vdoGrpMdaChannels	long	tmnxVdoGrpMdaChannels	The value of tmnxVdoGrpMdaChannels indicates the number of channels being served on this MDA.
vdoGrpMdaEgressStreamResets	long	tmnxVdoGrpMdaEgressStreamResets	The value of tmnxVdoGrpMdaEgressStreamResets indicates the number of egress stream resets on this MDA. An egress stream reset occurs when there are no packets to transmit on the MDA.
vdoGrpMdaHighPktPoolLimitHit	long	tmnxVdoGrpMdaHighPktPoolLimitHit	The value of tmnxVdoGrpMdaHighPktPoolLimitHit indicates the number of times the high packet pool limit has been hit. A high value of this object indicates potential failure in ingress packet storage.
vdoGrpMdaIngressStreamResets	long	tmnxVdoGrpMdaIngressStreamResets	The value of tmnxVdoGrpMdaIngressStreamResets indicates the number of ingress stream resets on this MDA. An ingress stream reset occurs when the ingress stream stopped coming in for more than one second.
vdoGrpMdaMaxBwExceeded	long	tmnxVdoGrpMdaMaxBwExceeded	The value of tmnxVdoGrpMdaMaxBwExceeded indicates the number of times maximum allowed bandwidth has been exceeded for each egress stream.
vdoGrpMdaRequestedRtpPkts	long	tmnxVdoGrpMdaRequestedRtpPkts	The value of tmnxVdoGrpMdaRequestedRtpPkts indicates the number of Real-time Transport Protocol (RTP) packets requested in the Real-time Transport Control Protocol (RTCP) feedback (FB) messages received on this MDA.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpMdaRtcpConfigErrors	long	tmnxVdoGrpMdaRtcpConfigErrors	The value of tmnxVdoGrpMdaRtcpConfigErrors indicates the number of Real-time Transport Control Protocol (RTCP) config errors on this MDA. These errors occur when there is inconsistency between the RTCP values and the configured values.
vdoGrpMdaRtcpIntErrors	long	tmnxVdoGrpMdaRtcpIntErrors	The value of tmnxVdoGrpMdaRtcpIntErrors indicates the number of Real-time Transport Control Protocol (RTCP) interface related errors on this MDA.
vdoGrpMdaRtcpIpcErrors	long	tmnxVdoGrpMdaRtcpIpcErrors	The value of tmnxVdoGrpMdaRtcpIpcErrors indicates the number of Real-time Transport Control Protocol (RTCP) inter-process communication message processing errors on this MDA.
vdoGrpMdaRtcpParseErrors	long	tmnxVdoGrpMdaRtcpParseErrors	The value of tmnxVdoGrpMdaRtcpParseErrors indicates the number of Real-time Transport Control Protocol (RTCP) packet parsing errors on this MDA.
vdoGrpMdaRtcpSgErrors	long	tmnxVdoGrpMdaRtcpSgErrors	The value of tmnxVdoGrpMdaRtcpSgErrors indicates the number of Real-time Transport Control Protocol (RTCP) channel errors on this MDA. These errors occue when a channel is not found for a given interface to process RTCP packets.
vdoGrpMdaRtcpSubErrors	long	tmnxVdoGrpMdaRtcpSubErrors	The value of tmnxVdoGrpMdaRtcpSubErrors indicates the number of Real-time Transport Control Protocol (RTCP) subscriber parameter errors on this MDA. These errors occur when the subscriber calculations exceed the maximum allowed bandwidth.
vdoGrpMdaRxDataOctets	UINT128	tmnxVdoGrpMdaRxDataOctets	The value of tmnxVdoGrpMdaRxDataOctets indicates the number of data octets received on this MDA.
vdoGrpMdaRxDataOctetsHigh32	long	tmnxVdoGrpMdaRxDataOctetsHigh32	The value of tmnxVdoGrpMdaRxDataOctetsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaRxDataOctets.
vdoGrpMdaRxDataOctetsLow32	long	tmnxVdoGrpMdaRxDataOctetsLow32	The value of tmnxVdoGrpMdaRxDataOctetsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaRxDataOctets.
vdoGrpMdaRxDataPacketErrors	UINT128	tmnxVdoGrpMdaRxDataPacketErrors	The value of tmnxVdoGrpMdaRxDataPacketErrors indicates the number of malformed or non-RTP (Real Time Transport Protocol) packets received on this MDA.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpMdaRxDataPackets	UINT128	tmnxVdoGrpMdaRxDataPackets	The value of tmnxVdoGrpMdaRxDataPackets indicates the number of data packets received on this MDA.
vdoGrpMdaRxDataPacketsHigh32	long	tmnxVdoGrpMdaRxDataPacketsHigh32	The value of tmnxVdoGrpMdaRxDataPacketsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaRxDataPackets.
vdoGrpMdaRxDataPacketsLow32	long	tmnxVdoGrpMdaRxDataPacketsLow32	The value of tmnxVdoGrpMdaRxDataPacketsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaRxDataPackets.
vdoGrpMdaRxDataPktErrsHigh32	long	tmnxVdoGrpMdaRxDataPktErrsHigh32	The value of tmnxVdoGrpMdaRxDataPktErrsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaRxDataPacketErrors.
vdoGrpMdaRxDataPktErrsLow32	long	tmnxVdoGrpMdaRxDataPktErrsLow32	The value of tmnxVdoGrpMdaRxDataPktErrsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaRxDataPacketErrors.
vdoGrpMdaSsrcCollisions	long	tmnxVdoGrpMdaSsrcCollisions	The value of tmnxVdoGrpMdaSsrcCollisions indicates the number of synchronization source (SSRC) id collisions on this MDA.
vdoGrpMdaTxDataOctets	UINT128	tmnxVdoGrpMdaTxDataOctets	The value of tmnxVdoGrpMdaTxDataOctets indicates the number of data octets transmitted on this MDA.
vdoGrpMdaTxDataOctetsHigh32	long	tmnxVdoGrpMdaTxDataOctetsHigh32	The value of tmnxVdoGrpMdaTxDataOctetsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaTxDataOctets.
vdoGrpMdaTxDataOctetsLow32	long	tmnxVdoGrpMdaTxDataOctetsLow32	The value of tmnxVdoGrpMdaTxDataOctetsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaTxDataOctets.
vdoGrpMdaTxDataPacketErrors	UINT128	tmnxVdoGrpMdaTxDataPacketErrors	The value of tmnxVdoGrpMdaTxDataPacketErrors indicates the number of failed data packets due to lack of resources to be transmitted on this MDA.
vdoGrpMdaTxDataPackets	UINT128	tmnxVdoGrpMdaTxDataPackets	The value of tmnxVdoGrpMdaTxDataPackets indicates the number of data packets transmitted on this MDA.
vdoGrpMdaTxDataPacketsHigh32	long	tmnxVdoGrpMdaTxDataPacketsHigh32	The value of tmnxVdoGrpMdaTxDataPacketsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaTxDataPackets.
vdoGrpMdaTxDataPacketsLow32	long	tmnxVdoGrpMdaTxDataPacketsLow32	The value of tmnxVdoGrpMdaTxDataPacketsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaTxDataPackets.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpMdaTxDataPktErrsHigh32	long	tmnxVdoGrpMdaTxDataPktErrsHigh32	The value of tmnxVdoGrpMdaTxDataPktErrsHigh32 indicates the higher 32 bits of the value of tmnxVdoGrpMdaTxDataPacketErrors.
vdoGrpMdaTxDataPktErrsLow32	long	tmnxVdoGrpMdaTxDataPktErrsLow32	The value of tmnxVdoGrpMdaTxDataPktErrsLow32 indicates the lower 32 bits of the value of tmnxVdoGrpMdaTxDataPacketErrors.
vdoGrpMdaTxLostPackets	long	tmnxVdoGrpMdaTxLostPackets	The value of tmnxVdoGrpMdaTxLostPackets indicates the number of packets not found in the video MDA buffer for retransmission. When a retransmission request arrives, packets are checked in the buffer and if they are not found, the value of this object is incremented.
vdoGrpMdaUsedMemory	long	tmnxVdoGrpMdaUsedMemory	The value of tmnxVdoGrpMdaUsedMemory indicates the amount of cache being used by the video group for storing the video stream.

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Table I-16 isis statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceLevelOneReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelOneSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelOneConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).

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5620 SAM counter name	Type	MIB counter name	Description
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoReceivingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
InterfaceLevelTwoSendingStats MIB table name: ISIS-MIB.isisPacketCountTable Monitored class: isis.InterfaceLevelTwoConfig			
cnspCount	long	isisPacketCountCSNP	The number of IS-IS CSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
helloCount	long	isisPacketCountHello	The number of IS-IS Hello PDUs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
lspCount	long	isisPacketCountLSP	The number of IS-IS LSPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
psnpCount	long	isisPacketCountPSNP	The number of IS-IS PSNPs seen in this direction at this level. REFERENCE ISIS.aoi iSISControlPDUsSent (43).
LinkStatePduSiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			
csnpDropped	long	vRtrIsisCSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisCSNPDrop.
csnpReceived	long	vRtrIsisCSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisCSNPRecd.
csnpRetransmitted	long	vRtrIsisCSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisCSNPRetrans.

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5620 SAM counter name	Type	MIB counter name	Description
csnpSent	long	vRtrIsisCSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisCSNPSent.
helloDropped	long	vRtrIsisIIHDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisIIHDrop.
helloReceived	long	vRtrIsisIIHRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisIIHRecd.
helloRetransmitted	long	vRtrIsisIIHRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisIIHRetrans.
helloSent	long	vRtrIsisIIHSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisIIHSent.
lspDropped	long	vRtrIsisLSPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisLSPDrop.
lspReceived	long	vRtrIsisLSPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisLSPRecd.
lspRetransmitted	long	vRtrIsisLSPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisLSPRetrans.
lspSent	long	vRtrIsisLSPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisLSPSent.
psnpDropped	long	vRtrIsisPSNPDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisPSNPDrop.
psnpReceived	long	vRtrIsisPSNPRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisPSNPRecd.
psnpRetransmitted	long	vRtrIsisPSNPRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisPSNPRetrans.
psnpSent	long	vRtrIsisPSNPSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisPSNPSent.
unknownDropped	long	vRtrIsisUnknownDrop	The count of link state PDUs dropped by this instance of the protocol is maintained by vRtrIsisUnknownDrop.
unknownReceived	long	vRtrIsisUnknownRecd	The count of link state PDUs received by this instance of the protocol is maintained by vRtrIsisUnknownRecd.
unknownRetransmitted	long	vRtrIsisUnknownRetrans	The count of link state PDUs that had to be retransmitted by this instance of the protocol is maintained by vRtrIsisUnknownRetrans.

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5620 SAM counter name	Type	MIB counter name	Description
unknownSent	long	vRtrIsisUnknownSent	The count of link state PDUs sent out by this instance of the protocol is maintained by vRtrIsisUnknownSent.
SiteStats MIB table name: TIMETRA-ISIS-MIB.vRtrIsisStatsTable Monitored class: isis.Site			
cspfDroppedRequests	long	vRtrIsisCSPFDroppedRequests	vRtrIsisCSPFDroppedRequests maintains the number of dropped CSPF requests by the protocol.
cspfPathsFound	long	vRtrIsisCSPFPathsFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which paths satisfying the constraints were found.
cspfPathsNotFound	long	vRtrIsisCSPFPathsNotFound	vRtrIsisCSPFPathsFound maintains the number of responses to CSPF requests for which no paths satisfying the constraints were found.
cspfRequests	long	vRtrIsisCSPFRequests	vRtrIsisCSPFRequests maintains the number of CSPF requests made to the protocol.
initiatedPurges	long	vRtrIsisInitiatedPurges	The value of vRtrIsisInitiatedPurges counts the number of times purges have been initiated.
lspRegenerations	long	vRtrIsisLSPRegenerations	The value of vRtrIsisLSPRegenerations maintains the count of LSP regenerations.
spfRuns	long	vRtrIsisSpfRuns	The value of vRtrIsisSpfRuns indicates the number of times shortest path first calculations have been made.

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Table I-17 l2fib statistics

5620 SAM counter name	Type	MIB counter name	Description
MFibGrpSrcStats MIB table name: TIMETRA-SERV-MIB.tlsMFibStatsTable Monitored class: l2fib.MFibGrpSrc			
forwardedOctets	UINT128	tlsMFibStatsForwardedOctets	The value of tlsMFibStatsForwardedOctets indicates the number of octets that were forwarded to the SAPs and SDPs listed in the tlsMFibInfoTable.
forwardedPkts	UINT128	tlsMFibStatsForwardedPkts	The value of tlsMFibStatsForwardedPkts indicates the number of multicast packets that were forwarded to the SAPs and SDPs listed in the tlsMFibInfoTable.

Table I-18 l2fwd statistics

5620 SAM counter name	Type	MIB counter name	Description
AccessInterfaceStpStats MIB table name: TIMETRA-SAP-MIB.sapTlsInfoTable Monitored class: l2fwd.AccessInterfaceStp			
forwardTransitions	long	sapTlsStpForwardTransitions	The value of the object sapTlsStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.
inBadBpdus	long	sapTlsStpInBadBpdus	This object specifies the number of bad BPDUs received on this SAP.
inConfigBpdus	long	sapTlsStpInConfigBpdus	The value of the object sapTlsStpInConfigBpdus indicates the number of Configuration BPDUs received on this SAP.
inMultipleSpanningTreeBpdus	long	sapTlsStpInMstBpdus	The value of the object sapTlsStpInMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs received on this SAP.
inRapidSpanningTreeBpdus	long	sapTlsStpInRstBpdus	The value of the object sapTlsStpInRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs received on this SAP.
inTcnBpdus	long	sapTlsStpInTcnBpdus	The value of the object sapTlsStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this SAP.
outConfigBpdus	long	sapTlsStpOutConfigBpdus	The value of the object sapTlsStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this SAP.
outMultipleSpanningTreeBpdus	long	sapTlsStpOutMstBpdus	The value of the object sapTlsStpOutMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs sent out on this SAP.
outRapidSpanningTreeBpdus	long	sapTlsStpOutRstBpdus	The value of the object sapTlsStpOutRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs sent out on this SAP.
outTcnBpdus	long	sapTlsStpOutTcnBpdus	This object specifies the number of Topology Change Notification BPDUs sent out this SAP.
CircuitMrpInfoStats MIB table name: TIMETRA-SDP-MIB.sdpBindTlsMrpTable Monitored class: l2fwd.CircuitMrpInfo			
mrpDroppedPdus	long	sdpBindTlsMrpDroppedPdus	The value of sdpBindTlsMrpDroppedPdus indicates the number of dropped MRP packets on this SDP Bind.
mrpRxEmptyEvent	long	sdpBindTlsMrpRxEmptyEvent	The value of sdpBindTlsMrpRxEmptyEvent indicates the number of 'Empty' MRP events received on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
mrpRxInEvent	long	sdpBindTlsMrpRxInEvent	The value of sdpBindTlsMrpRxInEvent indicates the number of 'In' MRP events received on this SDP Bind.
mrpRxJoinEmptyEvent	long	sdpBindTlsMrpRxJoinEmptyEvent	The value of sdpBindTlsMrpRxJoinEmptyEvent indicates the number of 'Join Empty' MRP events received on this SDP Bind.
mrpRxJoinInEvent	long	sdpBindTlsMrpRxJoinInEvent	The value of sdpBindTlsMrpRxJoinInEvent indicates the number of 'Join-In' MRP events received on this SDP Bind.
mrpRxLeaveEvent	long	sdpBindTlsMrpRxLeaveEvent	The value of sdpBindTlsMrpRxLeaveEvent indicates the number of 'Leave' MRP events received on this SDP Bind.
mrpRxNewEvent	long	sdpBindTlsMrpRxNewEvent	The value of sdpBindTlsMrpRxNewEvent indicates the number of 'New' MRP events received on this SDP Bind.
mrpRxPdus	long	sdpBindTlsMrpRxPdus	The value of sdpBindTlsMrpRxPdus indicates the number of MRP packets received on this SDP Bind.
mrpTxEmptyEvent	long	sdpBindTlsMrpTxEmptyEvent	The value of sdpBindTlsMrpTxEmptyEvent indicates the number of 'Empty' MRP events transmitted on this SDP Bind.
mrpTxInEvent	long	sdpBindTlsMrpTxInEvent	The value of sdpBindTlsMrpTxInEvent indicates the number of 'In' MRP events transmitted on this SDP Bind.
mrpTxJoinEmptyEvent	long	sdpBindTlsMrpTxJoinEmptyEvent	The value of sdpBindTlsMrpTxJoinEmptyEvent indicates the number of 'Join Empty' MRP events transmitted on this SDP Bind.
mrpTxJoinInEvent	long	sdpBindTlsMrpTxJoinInEvent	The value of sdpBindTlsMrpTxJoinInEvent indicates the number of 'Join-In' MRP events transmitted on this SDP Bind.
mrpTxLeaveEvent	long	sdpBindTlsMrpTxLeaveEvent	The value of sdpBindTlsMrpTxLeaveEvent indicates the number of 'Leave' MRP events transmitted on this SDP Bind.
mrpTxNewEvent	long	sdpBindTlsMrpTxNewEvent	The value of sdpBindTlsMrpTxNewEvent indicates the number of 'New' MRP events transmitted on this SDP Bind.
mrpTxPdus	long	sdpBindTlsMrpTxPdus	The value of sdpBindTlsMrpTxPdus indicates the number of MRP packets transmitted on this SDP Bind.
CircuitStpStats MIB table name: TIMETRA-SDP-MIB.sdpBindTlsTable Monitored class: l2fwd.CircuitStp			
forwardTransitions	long	sdpBindTlsStpForwardTransitions	The value of the object sdpBindTlsStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.
inBadBpdus	long	sdpBindTlsStpInBadBpdus	The value of the object sdpBindTlsStpInBadBpdus indicates the number of bad BPDUs received on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
inConfigBpdus	long	sdpBindTlsStpInConfigBpdus	The value of the object sdpBindTlsStpInConfigBpdus indicates the number of Configuration BPDUs received on this SDP Bind.
inRapidSpanningTreeBpdus	long	sdpBindTlsStpInRstBpdus	The value of the object sdpBindTlsStpInRstBpdus indicates the number of Rapid Spanning Tree (Rst) BPDUs received on this SDP.
inTcnBpdus	long	sdpBindTlsStpInTcnBpdus	The value of the object sdpBindTlsStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this SDP Bind.
outConfigBpdus	long	sdpBindTlsStpOutConfigBpdus	The value of the object sdpBindTlsStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this SDP Bind.
outRapidSpanningTreeBpdus	long	sdpBindTlsStpOutRstBpdus	The value of the object sdpBindTlsStpOutRstBpdus indicates the number of Rapid Spanning Tree (Rstp) BPDUs sent out on this SDP.
outTcnBpdus	long	sdpBindTlsStpOutTcnBpdus	The value of the object sdpBindTlsStpOutTcnBpdus indicates the number of Topology Change Notification BPDUs sent out this SDP Bind.
L2AccessInterfaceMrpInfoStats MIB table name: TIMETRA-SAP-MIB.sapTlsMrpTable Monitored class: l2fwd.L2AccessInterfaceMrpInfo			
mrpDroppedPdus	long	sapTlsMrpDroppedPdus	The value of sapTlsMrpDroppedPdus indicates the number of dropped MRP packets on this SAP.
mrpRxEmptyEvent	long	sapTlsMrpRxEmptyEvent	The value of sapTlsMrpRxEmptyEvent indicates the number of 'Empty' MRP events received on this SAP.
mrpRxInEvent	long	sapTlsMrpRxInEvent	The value of sapTlsMrpRxInEvent indicates the number of 'In' MRP events received on this SAP.
mrpRxJoinEmptyEvent	long	sapTlsMrpRxJoinEmptyEvent	The value of sapTlsMrpRxJoinEmptyEvent indicates the number of 'Join Empty' MRP events received on this SAP.
mrpRxJoinInEvent	long	sapTlsMrpRxJoinInEvent	The value of sapTlsMrpRxJoinInEvent indicates the number of 'Join-In' MRP events received on this SAP.
mrpRxLeaveEvent	long	sapTlsMrpRxLeaveEvent	The value of sapTlsMrpRxLeaveEvent indicates the number of 'Leave' MRP events received on this SAP.
mrpRxNewEvent	long	sapTlsMrpRxNewEvent	The value of sapTlsMrpRxNewEvent indicates the number of 'New' MRP events received on this SAP.
mrpRxPdus	long	sapTlsMrpRxPdus	The value of sapTlsMrpRxPdus indicates the number of MRP packets received on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
mrpTxEmptyEvent	long	sapTlsMrpTxEmptyEvent	The value of sapTlsMrpTxEmptyEvent indicates the number of 'Empty' MRP events transmitted on this SAP.
mrpTxInEvent	long	sapTlsMrpTxInEvent	The value of sapTlsMrpTxInEvent indicates the number of 'In' MRP events transmitted on this SAP.
mrpTxJoinEmptyEvent	long	sapTlsMrpTxJoinEmptyEvent	The value of sapTlsMrpTxJoinEmptyEvent indicates the number of 'Join Empty' MRP events transmitted on this SAP.
mrpTxJoinInEvent	long	sapTlsMrpTxJoinInEvent	The value of sapTlsMrpTxJoinInEvent indicates the number of 'Join-In' MRP events transmitted on this SAP.
mrpTxLeaveEvent	long	sapTlsMrpTxLeaveEvent	The value of sapTlsMrpTxLeaveEvent indicates the number of 'Leave' MRP events transmitted on this SAP.
mrpTxNewEvent	long	sapTlsMrpTxNewEvent	The value of sapTlsMrpTxNewEvent indicates the number of 'New' MRP events transmitted on this SAP.
mrpTxPdus	long	sapTlsMrpTxPdus	The value of sapTlsMrpTxPdus indicates the number of MRP packets transmitted on this SAP.
PipStpInfoStats MIB table name: TIMETRA-SERV-MIB.tlsPipInfoTable Monitored class: l2fwd.PipStpInfo			
pipStpForwardTransitions	long	tlsPipStpForwardTransitions	The value of the object tlsPipStpForwardTransitions indicates the number of times this port has transitioned from the Learning state to the Forwarding state.
pipStpInBadBpdus	long	tlsPipStpInBadBpdus	This object specifies the number of bad BPDUs received on this PIP uplink.
pipStpInConfigBpdus	long	tlsPipStpInConfigBpdus	The value of the object tlsPipStpInConfigBpdus indicates the number of Configuration BPDUs received on this PIP uplink.
pipStpInMstBpdus	long	tlsPipStpInMstBpdus	The value of the object tlsPipStpInMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs received on this PIP uplink.
pipStpInRstBpdus	long	tlsPipStpInRstBpdus	The value of the object tlsPipStpInRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs received on this PIP uplink.
pipStpInTcnBpdus	long	tlsPipStpInTcnBpdus	The value of the object tlsPipStpInTcnBpdus indicates the number of Topology Change Notification BPDUs received on this PIP uplink.
pipStpOutConfigBpdus	long	tlsPipStpOutConfigBpdus	The value of the object tlsPipStpOutConfigBpdus indicates the number of Configuration BPDUs sent out this PIP uplink.

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5620 SAM counter name	Type	MIB counter name	Description
pipStpOutMstBpdus	long	tlsPipStpOutMstBpdus	The value of the object tlsPipStpOutMstBpdus indicates the number of Multiple Spanning Tree (MST) BPDUs sent out on this PIP uplink.
pipStpOutRstBpdus	long	tlsPipStpOutRstBpdus	The value of the object tlsPipStpOutRstBpdus indicates the number of Rapid Spanning Tree (RST) BPDUs sent out on this PIP uplink.
pipStpOutTcnBpdus	long	tlsPipStpOutTcnBpdus	This object specifies the number of Topology Change Notification BPDUs sent out this PIP uplink.
SiteFibStats MIB table name: TIMETRA-SERV-MIB.svcTlsInfoTable Monitored class: l2fwd.SiteFib			
entries	long	svcTlsFdbNumEntries	The value of the object svcTlsFdbNumEntries indicates the current number of entries in the FDB of this service.
provisionedSize	long	svcTlsFdbTableSize	The value of the object svcTlsFdbTableSize specifies the maximum number of learned and static entries allowed in the FDB of this service. The maximum value of svcTlsFdbTableSize is '511999', when the the value of TIMETRA-CHASSIS-MIB::tmnxChassisOperMode is 'd'. The maximum value of svcTlsFdbTableSize is '196607', when the the value of TIMETRA-CHASSIS-MIB::tmnxChassisOperMode is 'c'. In other cases, the maximum value of svcTlsFdbTableSize is '131071'. DEFVAL { 250 }.
staticEntries	long	svcTlsFdbNumStaticEntries	The value of the object svcTlsFdbNumStaticEntries indicates the current number of static entries in the FDB of this service.
SiteStpStats MIB table name: TIMETRA-SERV-MIB.svcTlsInfoTable Monitored class: l2fwd.SiteStp			
timeSinceTopologyChange	long	svcTlsStpTimeSinceTopologyChange	The value of the object svcTlsStpTimeSinceTopologyChange indicates the time (in hundredths of a second) since the last time a topology change was detected by the Spanning Tree Protocol instance associated with this service.
topologyChanges	long	svcTlsStpTopologyChanges	The value of the object svcTlsStpTopologyChanges indicates the total number of topology changes detected by the Spanning Tree Protocol instance associated with this service since the management entity was last reset or initialized.

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Table I-19 lag statistics

5620 SAM counter name	Type	MIB counter name	Description
LagStats MIB table name: TIMETRA-LAG-MIB.tLagOperationTable Monitored class: lag.Interface			
portThresholdFalling	long	tLagPortThresholdFalling	counts the number of linkDown or dynamicCost events for the Link Aggregation Group caused by the number of physical ports being less than or equal to tLagPortThreshold value.
portThresholdRising	long	tLagPortThresholdRising	counts the number of linkUp or dynamicCost events for the Link Aggregation Group caused by the number of physical ports being greater than tLagPortThreshold value.
MultiChassisLagMemberStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcLagLagStatsTable Monitored classes: • lag.MultiChassisLagMember • multichassis.MultiChassisLagMember			
configPacketsReceived	long	tmnxMcLagLagStatsPktsRxConfig	The value of tmnxMcLagLagStatsPktsRxConfig indicates how many MC-Lag control packets of type lag config were received on this system from the peer for this lag.
configPacketsTransmitted	long	tmnxMcLagLagStatsPktsTxConfig	The value of tmnxMcLagLagStatsPktsTxConfig indicates how many MC-Lag control packets of type lag config were sent on this system to the peer for this lag.
failedPacketsTransmitted	long	tmnxMcLagLagStatsPktsTxFailed	The value of tmnxMcLagLagStatsPktsTxFailed indicates how many MC-Lag control packets failed to be transmitted on this system to the peer for this lag.
statePacketsReceived	long	tmnxMcLagLagStatsPktsRxState	The value of tmnxMcLagLagStatsPktsRxState indicates how many MC-Lag control packets of type lag state were received on this system from the peer for this lag.
statePacketsTransmitted	long	tmnxMcLagLagStatsPktsTxState	The value of tmnxMcLagLagStatsPktsTxState indicates how many MC-Lag control packets of type lag state were sent on this system to the peer for this lag.

Table I-20 ldp statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpIfStatsTable Monitored class: ldp.Interface			
existingAdjacencies	long	vRtrLdpIfExistingAdjacencies	The value of vRtrLdpIfExistingAdjacencies gives a count of the total active adjacencies on this LDP interface or with this targeted peer.
LdpEgressStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpEgrStatisticsTable Monitored class: ldp.AccountingFecPrefix			
ldpInProfileOctetsFc0	UINT128	vRtrLdpInProfileOctetsFc0	The value of vRtrLdpInProfileOctetsFc0 indicates the number of in profile octets received for Forwarding Class 0.
ldpInProfileOctetsFc1	UINT128	vRtrLdpInProfileOctetsFc1	The value of vRtrLdpInProfileOctetsFc1 indicates the number of in profile octets received for Forwarding Class 1.
ldpInProfileOctetsFc2	UINT128	vRtrLdpInProfileOctetsFc2	The value of vRtrLdpInProfileOctetsFc2 indicates the number of in profile octets received for Forwarding Class 2.
ldpInProfileOctetsFc3	UINT128	vRtrLdpInProfileOctetsFc3	The value of vRtrLdpInProfileOctetsFc3 indicates the number of in profile octets received for Forwarding Class 3.
ldpInProfileOctetsFc4	UINT128	vRtrLdpInProfileOctetsFc4	The value of vRtrLdpInProfileOctetsFc4 indicates the number of in profile octets received for Forwarding Class 4.
ldpInProfileOctetsFc5	UINT128	vRtrLdpInProfileOctetsFc5	The value of vRtrLdpInProfileOctetsFc5 indicates the number of in profile octets received for Forwarding Class 5.
ldpInProfileOctetsFc6	UINT128	vRtrLdpInProfileOctetsFc6	The value of vRtrLdpInProfileOctetsFc6 indicates the number of in profile octets received for Forwarding Class 6.
ldpInProfileOctetsFc7	UINT128	vRtrLdpInProfileOctetsFc7	The value of vRtrLdpInProfileOctetsFc7 indicates the number of in profile octets received for Forwarding Class 7.
ldpInProfilePktsFc0	UINT128	vRtrLdpInProfilePktsFc0	The value of vRtrLdpInProfilePktsFc0 indicates the number of in profile packets received for Forwarding Class 0.
ldpInProfilePktsFc1	UINT128	vRtrLdpInProfilePktsFc1	The value of vRtrLdpInProfilePktsFc1 indicates the number of in profile packets received for Forwarding Class 1.
ldpInProfilePktsFc2	UINT128	vRtrLdpInProfilePktsFc2	The value of vRtrLdpInProfilePktsFc2 indicates the number of in profile packets received for Forwarding Class 2.
ldpInProfilePktsFc3	UINT128	vRtrLdpInProfilePktsFc3	The value of vRtrLdpInProfilePktsFc3 indicates the number of in profile packets received for Forwarding Class 3.
ldpInProfilePktsFc4	UINT128	vRtrLdpInProfilePktsFc4	The value of vRtrLdpInProfilePktsFc4 indicates the number of in profile packets received for Forwarding Class 4.

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5620 SAM counter name	Type	MIB counter name	Description
ldpInProfilePktsFc5	UINT128	vRtrLdpInProfilePktsFc5	The value of vRtrLdpInProfilePktsFc5 indicates the number of in profile packets received for Forwarding Class 5.
ldpInProfilePktsFc6	UINT128	vRtrLdpInProfilePktsFc6	The value of vRtrLdpInProfilePktsFc6 indicates the number of in profile packets received for Forwarding Class 6.
ldpInProfilePktsFc7	UINT128	vRtrLdpInProfilePktsFc7	The value of vRtrLdpInProfilePktsFc7 indicates the number of in profile packets received for Forwarding Class 7.
ldpOutOfProfOctetsFc0	UINT128	vRtrLdpOutOfProfOctetsFc0	The value of vRtrLdpOutOfProfOctetsFc0 indicates the number of out of profile octets received for Forwarding Class 0.
ldpOutOfProfOctetsFc1	UINT128	vRtrLdpOutOfProfOctetsFc1	The value of vRtrLdpOutOfProfOctetsFc1 indicates the number of out of profile octets received for Forwarding Class 1.
ldpOutOfProfOctetsFc2	UINT128	vRtrLdpOutOfProfOctetsFc2	The value of vRtrLdpOutOfProfOctetsFc2 indicates the number of out of profile octets received for Forwarding Class 2.
ldpOutOfProfOctetsFc3	UINT128	vRtrLdpOutOfProfOctetsFc3	The value of vRtrLdpOutOfProfOctetsFc3 indicates the number of out of profile octets received for Forwarding Class 3.
ldpOutOfProfOctetsFc4	UINT128	vRtrLdpOutOfProfOctetsFc4	The value of vRtrLdpOutOfProfOctetsFc4 indicates the number of out of profile octets received for Forwarding Class 4.
ldpOutOfProfOctetsFc5	UINT128	vRtrLdpOutOfProfOctetsFc5	The value of vRtrLdpOutOfProfOctetsFc5 indicates the number of out of profile octets received for Forwarding Class 5.
ldpOutOfProfOctetsFc6	UINT128	vRtrLdpOutOfProfOctetsFc6	The value of vRtrLdpOutOfProfOctetsFc6 indicates the number of out of profile octets received for Forwarding Class 6.
ldpOutOfProfOctetsFc7	UINT128	vRtrLdpOutOfProfOctetsFc7	The value of vRtrLdpOutOfProfOctetsFc7 indicates the number of out of profile octets received for Forwarding Class 7.
ldpOutOfProfPktsFc0	UINT128	vRtrLdpOutOfProfPktsFc0	The value of vRtrLdpOutOfProfPktsFc0 indicates the number of out of profile packets received for Forwarding Class 0.
ldpOutOfProfPktsFc1	UINT128	vRtrLdpOutOfProfPktsFc1	The value of vRtrLdpOutOfProfPktsFc1 indicates the number of out of profile packets received for Forwarding Class 1.
ldpOutOfProfPktsFc2	UINT128	vRtrLdpOutOfProfPktsFc2	The value of vRtrLdpOutOfProfPktsFc2 indicates the number of out of profile packets received for Forwarding Class 2.
ldpOutOfProfPktsFc3	UINT128	vRtrLdpOutOfProfPktsFc3	The value of vRtrLdpOutOfProfPktsFc3 indicates the number of out of profile packets received for Forwarding Class 3.
ldpOutOfProfPktsFc4	UINT128	vRtrLdpOutOfProfPktsFc4	The value of vRtrLdpOutOfProfPktsFc4 indicates the number of out of profile packets received for Forwarding Class 4.
ldpOutOfProfPktsFc5	UINT128	vRtrLdpOutOfProfPktsFc5	The value of vRtrLdpOutOfProfPktsFc5 indicates the number of out of profile packets received for Forwarding Class 5.

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5620 SAM counter name	Type	MIB counter name	Description
ldpOutOfProfPktsFc6	UINT128	vRtrLdpOutOfProfPktsFc6	The value of vRtrLdpOutOfProfPktsFc6 indicates the number of out of profile packets received for Forwarding Class 6.
ldpOutOfProfPktsFc7	UINT128	vRtrLdpOutOfProfPktsFc7	The value of vRtrLdpOutOfProfPktsFc7 indicates the number of out of profile packets received for Forwarding Class 7.
SessionStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpSessionStatsTable Monitored class: ldp.Session			
addressMessagesReceived	long	vRtrLdpSessStatsAddrIn	The value of vRtrLdpSessStatsAddrIn counts the number of Address Messages that have been received during this session.
addressMessagesSent	long	vRtrLdpSessStatsAddrOut	The value of vRtrLdpSessStatsAddrOut counts the number of Address Messages that have been sent during this session.
addressWithdrawMessagesReceived	long	vRtrLdpSessStatsAddrWithdrawIn	The value of vRtrLdpSessStatsAddrWithdrawIn counts the number of Address Withdraw Messages that have been received during this session.
addressWithdrawMessagesSent	long	vRtrLdpSessStatsAddrWithdrawOut	The value of vRtrLdpSessStatsAddrWithdrawOut counts the number of Address Withdraw Messages that have been sent during this session.
fecReceived	long	vRtrLdpSessStatsFECRecv	The value of vRtrLdpSessStatsFECRecv counts the number of FECs received for this session.
fecSent	long	vRtrLdpSessStatsFECSent	The value of vRtrLdpSessStatsFECSent counts the number of FECs sent for this session.
helloMessagesReceived	long	vRtrLdpSessStatsHelloIn	The value of vRtrLdpSessStatsHelloIn counts the number of Hello Messages that have been received during this session.
helloMessagesSent	long	vRtrLdpSessStatsHelloOut	The value of vRtrLdpSessStatsHelloOut counts the number of Hello Messages that have been sent during this session.
initMessagesReceived	long	vRtrLdpSessStatsInitIn	The value of vRtrLdpSessStatsInitIn counts the number of Init Messages that have been received during this session.
initMessagesSent	long	vRtrLdpSessStatsInitOut	The value of vRtrLdpSessStatsInitOut counts the number of Init Messages that have been sent during this session.
keepAliveMessagesReceived	long	vRtrLdpSessStatsKeepaliveIn	The value of vRtrLdpSessStatsKeepaliveIn counts the number of Keepalive Messages that have been received during this session.
keepAliveMessagesSent	long	vRtrLdpSessStatsKeepaliveOut	The value of vRtrLdpSessStatsKeepaliveOut counts the number of Keepalive Messages that have been sent during this session.

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5620 SAM counter name	Type	MIB counter name	Description
labelAbortsReceived	long	vRtrLdpSessStatsLabelAbortIn	The value of vRtrLdpSessStatsLabelAbortIn counts the number of Label Abort Messages that have been received during this session.
labelAbortsSent	long	vRtrLdpSessStatsLabelAbortOut	The value of vRtrLdpSessStatsLabelAbortOut counts the number of Label Abort Messages that have been sent during this session.
labelMappingsReceived	long	vRtrLdpSessStatsLabelMappingIn	The value of vRtrLdpSessStatsLabelMappingIn counts the number of Label Mapping Messages that have been received during this session.
labelMappingsSent	long	vRtrLdpSessStatsLabelMappingOut	The value of vRtrLdpSessStatsLabelMappingOut counts the number of Label Mapping Messages that have been sent during this session.
labelReleasesReceived	long	vRtrLdpSessStatsLabelReleaseIn	The value of vRtrLdpSessStatsLabelReleaseIn counts the number of Label Release Messages that have been received during this session.
labelReleasesSent	long	vRtrLdpSessStatsLabelReleaseOut	The value of vRtrLdpSessStatsLabelReleaseOut counts the number of Label Release Messages that have been sent during this session.
labelRequestsReceived	long	vRtrLdpSessStatsLabelRequestIn	The value of vRtrLdpSessStatsLabelRequestIn counts the number of Label Request Messages that have been received during this session.
labelRequestsSent	long	vRtrLdpSessStatsLabelRequestOut	The value of vRtrLdpSessStatsLabelRequestOut counts the number of Label Request Messages that have been sent during this session.
labelWithdrawsReceived	long	vRtrLdpSessStatsLabelWithdrawIn	The value of vRtrLdpSessStatsLabelWithdrawIn counts the number of Label Withdraw Messages that have been received during this session.
labelWithdrawsSent	long	vRtrLdpSessStatsLabelWithdrawOut	The value of vRtrLdpSessStatsLabelWithdrawOut counts the number of Label Withdraw Messages that have been sent during this session.
linkAdjacencies	long	vRtrLdpSessStatsLinkAdj	The value of vRtrLdpSessStatsLinkAdj specifies the number of link adjacencies for this session.
notificationMessagesReceived	long	vRtrLdpSessStatsNotificationIn	The value of vRtrLdpSessStatsNotificationIn counts the number of Notification Messages that have been received during this session.
notificationMessagesSent	long	vRtrLdpSessStatsNotificationOut	The value of vRtrLdpSessStatsNotificationOut counts the number of Notification Messages that have been sent during this session.

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5620 SAM counter name	Type	MIB counter name	Description
targetedAdjacencies	long	vRtrLdpSessStatsTargAdj	The value of vRtrLdpSessStatsTargAdj specifies the number of targeted adjacencies for this session.
SiteStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpStatsTable Monitored class: ldp.Site			
activeAdjacencies	long	vRtrLdpStatsActiveAdjacencies	The value of vRtrLdpStatsActiveAdjacencies specifies the number of active adjacencies (i.e. established sessions) associated with the LDP instance.
activeInterfaces	long	vRtrLdpStatsActiveInterfaces	The value of vRtrLdpStatsActiveInterfaces specifies the number of active (i.e. operationally up) interfaces associated with the LDP instance.
activeSessions	long	vRtrLdpStatsActiveSessions	The value of vRtrLdpStatsActiveSessions specifies the number of active sessions (i.e. session in some form of creation) associated with the LDP instance.
activeTargetedSessions	long	vRtrLdpStatsActiveTargSessions	The value of vRtrLdpStatsActiveTargSessions specifies the number of active (i.e. operationally up) targeted sessions associated with the LDP instance.
addressFECsReceived	long	vRtrLdpStatsAddrFECRecv	The value of vRtrLdpStatsAddrFECRecv specifies the number of Address FECs received by the LDP instance from its neighbors.
addressFECsSent	long	vRtrLdpStatsAddrFECSent	The value of vRtrLdpStatsAddrFECSent specifies the number of Address FECs sent by the LDP instance to its neighbors.
attemptedSessions	long	vRtrLdpStatsAttemptedSessions	The value of vRtrLdpStatsAttemptedSessions specifies the total number of attempted sessions for this LDP instance.
badLdpIdentifierErrors	long	vRtrLdpStatsBadLdpIdentifierErrors	The value of vRtrLdpStatsBadLdpIdentifierErrors gives the number of Bad LDP Identifier Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badMessageLengthErrors	long	vRtrLdpStatsBadMessageLengthErrors	The value of vRtrLdpStatsBadMessageLengthErrors gives the number of Bad Message Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
badPduLengthErrors	long	vRtrLdpStatsBadPduLengthErrors	The value of vRtrLdpStatsBadPduLengthErrors gives the number of Bad Pdu Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.

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5620 SAM counter name	Type	MIB counter name	Description
badTlvLengthErrors	long	vRtrLdpStatsBadTlvLengthErrors	The value of vRtrLdpStatsBadTlvLengthErrors gives the number of Bad TLV Length Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
inactiveInterfaces	long	vRtrLdpStatsInactiveInterfaces	The value of vRtrLdpStatsInactiveInterfaces specifies the number of inactive (i.e. operationally down) interfaces associated with the LDP instance.
inactiveTargetedSessions	long	vRtrLdpStatsInactiveTargSessions	The value of vRtrLdpStatsInactiveTargSessions specifies the number of inactive (i.e. operationally down) targeted sessions associated with the LDP instance.
keepAliveExpiredErrors	long	vRtrLdpStatsKeepAliveExpiredErrors	The value of vRtrLdpStatsKeepAliveExpiredErrors gives the number of Session Keep Alive Timer Expired Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
malformedTlvValueErrors	long	vRtrLdpStatsMalformedTlvValueErrors	The value of vRtrLdpStatsMalformedTlvValueErrors gives the number of Malformed TLV Value Fatal Errors detected for sessions associated with this LDP instance. REFERENCE LDP Specification, Section 3.5.1.2.
operDownEvents	long	vRtrLdpStatsOperDownEvents	The value of vRtrLdpStatsOperDownEvents specifies the number of times the LDP instance has gone operationally down since the instance was created.
serviceFECsReceived	long	vRtrLdpStatsSvcFECRecv	The value of vRtrLdpStatsSvcFECRecv specifies the number of Service FECs received by the LDP instance from its neighbors.
serviceFECsSent	long	vRtrLdpStatsSvcFECSent	The value of vRtrLdpStatsSvcFECSent specifies the number of Service FECs sent by the LDP instance to its neighbors.
sessionRejectedAdvertisementModeErrors	long	vRtrLdpStatsSessRejAdvErrors	The value of vRtrLdpStatsSessRejAdvErrors gives the total number of Session Rejected/Parameters Advertisement Mode Error Notification Messages sent or received by this LDP instance.
sessionRejectedLabelRangeErrors	long	vRtrLdpStatsSessRejLabelRangeErrors	The value of vRtrLdpStatsSessRejLabelRangeErrors gives the total number of Session Rejected/Parameters Label Range Error Notification Messages sent or received by this LDP instance.

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5620 SAM counter name	Type	MIB counter name	Description
sessionRejectedMaxPduLengthErrors	long	vRtrLdpStatsSessRejMaxPduErrors	The value of vRtrLdpStatsSessRejMaxPduErrors gives the total number of Session Rejected/Parameters Max Pdu Length Error Notification Messages sent or received by this LDP instance.
sessionRejectedNoHelloErrors	long	vRtrLdpStatsSessRejNoHelloErrors	The value of vRtrLdpStatsSessRejNoHelloErrors gives the total number of Session Rejected/No Hello Error Notification Messages sent or received by this LDP instance.
shutdownNotificationsReceived	long	vRtrLdpStatsShutdownNotifRecv	The value of vRtrLdpStatsShutdownNotifRecv gives the number of Shutdown Notifications received related to sessions associated with this LDP instance.
shutdownNotificationsSent	long	vRtrLdpStatsShutdownNotifSent	The value of vRtrLdpStatsShutdownNotifSent gives the number of Shutdown Notifications sent related to sessions associated with this LDP instance.
TargetedPeerStats MIB table name: TIMETRA-LDP-MIB.vRtrLdpIfStatsTable Monitored class: ldp.TargetedPeer			
existingAdjacencies	long	vRtrLdpIfExistingAdjacencies	The value of vRtrLdpIfExistingAdjacencies gives a count of the total active adjacencies on this LDP interface or with this targeted peer.

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Table I-21 lldp statistics

5620 SAM counter name	Type	MIB counter name	Description
LLDPRxPortStats MIB table name: TIMETRA-LLDP-MIB.tmnxLldpStatsRxPortTable Monitored class: lldp.LLDPPortConfiguration			

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5620 SAM counter name	Type	MIB counter name	Description
lldpStatsRxPortAgeouts	long	tmnxLldpStatsRxPortAgeouts	The counter that represents the number of age-outs that occurred on a given port. An age-out is the number of times the complete set of information advertised by a particular MSAP has been deleted from tables contained in tmnxLldpRemoteSystemsData and lldpExtensions objects because the information timeliness interval has expired. This counter is similar to lldpStatsRemTablesAgeouts, except that the counter is on a per port basis. This enables NMS to poll tables associated with the tmnxLldpRemoteSystemsData objects and all LLDP extension objects associated with remote systems on the indicated port only. This counter should be set to zero during agent initialization and its value should not be saved in non-volatile storage. When a port's admin status changes from 'disabled' to 'rxOnly', 'txOnly' or 'txAndRx', the counter associated with the same port should reset to 0. The agent should also flush all remote system information associated with the same port. This counter should be incremented only once when the complete set of information is invalidated (aged out) from all related tables on a particular port. Partial ageing is not allowed, and thus, should not change the value of this counter. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortFrameDiscard	long	tmnxLldpStatsRxPortFrameDiscard	The number of LLDP frames received by this LLDP agent on the indicated port, and then discarded for any reason. This counter can provide an indication that LLDP header formating problems may exist with the local LLDP agent in the sending system or that LLDPDU validation problems may exist with the local LLDP agent in the receiving system. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortFrameErrs	long	tmnxLldpStatsRxPortFrameErrs	The number of invalid LLDP frames received by this LLDP agent on the indicated port, while this LLDP agent is enabled. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortFrames	long	tmnxLldpStatsRxPortFrames	The number of valid LLDP frames received by this LLDP agent on the indicated port, while this LLDP agent is enabled. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
lldpStatsRxPortTLVDiscard	long	tmnxLldpStatsRxPortTLVDiscard	The number of LLDP TLVs discarded for any reason by this LLDP agent on the indicated port. REFERENCE IEEE Std 802.1AB-200X 10.5.2.

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5620 SAM counter name	Type	MIB counter name	Description
lldpStatsRxPortTLVUnknown	long	tmnxLldpStatsRxPortTLVUnknown	The number of LLDP TLVs received on the given port that are not recognized by this LLDP agent on the indicated port. An unrecognized TLV is referred to as the TLV whose type value is in the range of reserved TLV types (000 1001 - 111 1110) in Table 9.1 of IEEE Std 802.1AB-2004. An unrecognized TLV may be a basic management TLV from a later LLDP version. REFERENCE IEEE Std 802.1AB-200X 10.5.2.
LLDPTxPortStats MIB table name: TIMETRA-LLDP-MIB.tmnxLldpStatsTxPortTable Monitored class: lldp.LLDPPortConfiguration			
lldpStatsTxLLDPDULengthErrs	long	tmnxLldpStatsTxLLDPDULengthErrs	The number of LLDPD Length Errors recorded for the Port. REFERENCE IEEE Std 802.1AB-200X 10.2.7.2.
lldpStatsTxPortFrames	long	tmnxLldpStatsTxPortFrames	The number of LLDP frames transmitted by this LLDP agent on the indicated port. REFERENCE IEEE Std 802.1AB-200X 10.5.2.

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Table I-22 mld statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceStats MIB table name: TIMETRA-MLD-MIB.vRtrMldIfStatsTable Monitored class: mld.Interface			
importPolicyDrops	long	vRtrMldIfImportPolicyDrops	The value of vRtrMldIfImportPolicyDrops indicates the total number of times the MLD protocol instance matched the host IP address or group or source addresses specified in the import policy vRtrMldIfImportPolicy.
rxBadChecksumPkts	long	vRtrMldIfRxBadChecksumPkts	The value of vRtrMldIfRxBadChecksumPkts indicates the total number of MLD packets with bad checksum received on this interface.
rxBadEncodings	long	vRtrMldIfRxBadEncodings	The value of vRtrMldIfRxBadEncodings indicates the total number of MLD packets received on this interface which were not encoded correctly.
rxBadLenPkts	long	vRtrMldIfRxBadLenPkts	The value of vRtrMldIfRxBadLenPkts indicates the total number of MLD packets with bad length received on this interface.
rxBadReceiveIfPkts	long	vRtrMldIfRxBadReceiveIfPkts	The value of vRtrMldIfRxBadReceiveIfPkts indicates the total number of MLD packets incorrectly received on this interface.
rxGenQueries	long	vRtrMldIfRxGenQueries	The value of vRtrMldIfRxGenQueries indicates the total number of MLD General Queries received on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
rxGrpQueries	long	vRtrMldIfRxGrpQueries	The value of vRtrMldIfRxGrpQueries indicates the number of MLD Group Specific Queries received on this interface.
rxGrpSrcQueries	long	vRtrMldIfRxGrpSrcQueries	The value of vRtrMldIfRxGrpSrcQueries indicates the number of MLD Group and Source Specific Queries received on this interface.
rxLeaves	long	vRtrMldIfRxLeaves	The value of vRtrMldIfRxLeaves indicates the total number of MLD V2 Leaves received on this interface.
rxLocalScopePkts	long	vRtrMldIfRxLocalScopePkts	The value of the object vRtrMldIfRxLocalScopePkts indicates the number of MLD packets received on the link-local scope IPv6 multicast address.
rxNonLocal	long	vRtrMldIfRxNonLocal	The value of vRtrMldIfRxNonLocal indicates the total number of MLD packets received from a non-local sender.
rxNoRtrAlertPkts	long	vRtrMldIfRxNoRtrAlertPkts	The value of vRtrMldIfRxNoRtrAlertPkts indicates the total number of MLDv3 packets received on this interface which did not have the router alert flag set.
rxPktDrops	long	vRtrMldIfRxPktDrops	The value of vRtrMldIfRxPktDrops indicates the total number of MLD packets that were received on this interface but were dropped.
rxRsvdScopePkts	long	vRtrMldIfRxRsvdScopePkts	The value of the object vRtrMldIfRxRsvdScopePkts indicates the number of MLD packets received on the reserved scope IPv6 multicast address.
rxUnknownTypePkts	long	vRtrMldIfRxUnknownTypePkts	The value of vRtrMldIfRxUnknownTypePkts indicates the total number of MLD packets with unknown type received on this interface.
rxV1Reports	long	vRtrMldIfRxV1Reports	The value of vRtrMldIfRxV1Reports indicates the total number of MLD V1 Reports received on this interface.
rxV2Reports	long	vRtrMldIfRxV2Reports	The value of vRtrMldIfRxV2Reports indicates the total number of MLD V2 Reports received on this interface.
rxWrongVersions	long	vRtrMldIfRxWrongVersions	The value of vRtrMldIfRxWrongVersions indicates the total number of MLD packets with wrong versions received on this interface.
statsSGTypes	long	vRtrMldIfStatsSGTypes	The value of vRtrMldIfStatsSGTypes indicates the number of entries on this interface for which the source type is 'sg'.
statsStarGTypes	long	vRtrMldIfStatsStarGTypes	vRtrMldIfStatsStarGTypes indicates the number of entries on this interface for which the source type is 'starG'.
txErrors	long	vRtrMldIfTxErrors	The value of vRtrMldIfTxErrors indicates the total number of times there was an error transmitting the MLD packets on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
txGenQueries	long	vRtrMldIfTxGenQueries	The value of vRtrMldIfTxGenQueries indicates the number of MLD General Queries transmitted on this interface.
txGrpQueries	long	vRtrMldIfTxGrpQueries	The value of vRtrMldIfTxGrpQueries indicates the number of MLD Group Specific Queries transmitted on this interface.
txGrpSrcQueries	long	vRtrMldIfTxGrpSrcQueries	The value of vRtrMldIfTxGrpSrcQueries indicates the number of MLD Group and Source Specific Queries transmitted on this interface.
txLeaves	long	vRtrMldIfTxLeaves	The value of vRtrMldIfTxLeaves indicates the total number of MLD Leaves transmitted on this interface.
txV1Reports	long	vRtrMldIfTxV1Reports	The value of vRtrMldIfTxV1Reports indicates the total number of MLD V1 Reports transmitted on this interface.
txV2Reports	long	vRtrMldIfTxV2Reports	The value of vRtrMldIfTxV2Reports indicates the total number of MLD V2 Reports transmitted on this interface.
SiteStats MIB table name: TIMETRA-MLD-MIB.vRtrMldGenStatsTable Monitored class: mld.Site			
statsSGTypes	long	vRtrMldGenStatsSGTypes	The value of vRtrMldGenStatsSGTypes indicates the number of entries in vRtrMldGrpSrcTable for which the source type is 'sg'.
statsStarGTypes	long	vRtrMldGenStatsStarGTypes	The value of vRtrMldGenStatsStarGTypes indicates the number of entries in vRtrMldGrpSrcTable for which the source type is 'starG'.

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Table I-23 mpls statistics

5620 SAM counter name	Type	MIB counter name	Description
DynamicLspStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatTable Monitored class: mpls.DynamicLsp			
configuredPaths	long	vRtrMplsLspConfiguredPaths	The number of paths configured for this LSP.
operationalPaths	long	vRtrMplsLspOperationalPaths	The number of operational paths for this LSP. This includes the path currently active, as well as operational standby paths.
pathChanges	long	vRtrMplsLspPathChanges	The number of path changes this LSP has had. For every path change (path down, path up, path change), a corresponding syslog/trap (if enabled) is generated for it.

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5620 SAM counter name	Type	MIB counter name	Description
standbyPaths	long	vRtrMplsLspStandbyPaths	The number of standby paths configured for this LSP.
timeSinceLastPathChange	long	vRtrMplsLspLastPathChange	The time in 10-millisecond units since the last change occurred on this LSP.
timeSinceLastPrimaryUpState	long	vRtrMplsLspPrimaryTimeUp	The total time in 10-millisecond units that this LSP's primary path has been operational. For example, the percentage contribution of the primary path to the operational time is given by (vRtrMplsLspPrimaryTimeUp/vRtrMplsLspTimeUp * 100) .
LspPathStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspPathStatTable Monitored class: mpls.LspPath			
cspfQueries	long	vRtrMplsLspPathCspfQueries	The value of vRtrMplsLspPathCspfQueries specifies the number of CSPF queries that have been made for this LSP path.
retryAttempts	long	vRtrMplsLspPathRetryAttempts	The number of unsuccessful attempts which have been made to signal this path. As soon as the path gets signalled, this is set to 0.
timeDown	long	vRtrMplsLspPathTimeDown	The total time in 10-millisecond units that this LSP Path has not been operational.
timeUp	long	vRtrMplsLspPathTimeUp	The total time in 10-millisecond units that this LSP path has been operational. For example, the percentage up time can be determined by computing (vRtrMplsLspPathTimeUp/vRtrMplsLspAge * 100).
transitionCount	long	vRtrMplsLspPathTransitionCount	The object vRtrMplsLspPathTransitionCount maintains the number of transitions that have occurred for this LSP.
LspStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatTable Monitored classes: • mpls.DynamicLsp • mpls.StaticLsp • mpls.BypassOnlyLsp			
age	long	vRtrMplsLspAge	The age (i.e., time from creation till now) of this LSP in 10-millisecond periods.
timeSinceLastDownState	long	vRtrMplsLspTimeDown	The total time in 10-millisecond units that this LSP has not been operational.
timeSinceLastTransition	long	vRtrMplsLspLastTransition	The time in 10-millisecond units since the last transition occurred on this LSP.
timeSinceLastUpState	long	vRtrMplsLspTimeUp	The total time in 10-millisecond units that this LSP has been been operational. For example, the percentage up time can be determined by computing (vRtrMplsLspTimeUp/vRtrMplsLspAge * 100).

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5620 SAM counter name	Type	MIB counter name	Description
transitions	long	vRtrMplsLspTransitions	The number of state transitions (up -> down and down -> up) this LSP has undergone.
MplsInterfaceStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsIfStatTable Monitored class: mpls.Interface			
receiveOctets	UINT128	vRtrMplsIfRxOctetCount	The total number of bytes in MPLS labeled packets received on this interface.
receivePackets	UINT128	vRtrMplsIfRxPktCount	The total number of MPLS labeled packets received on this interface.
transmitOctets	UINT128	vRtrMplsIfTxOctetCount	The total number of bytes in MPLS labeled packets transmitted on this interface.
transmitPackets	UINT128	vRtrMplsIfTxPktCount	The total number of MPLS labeled packets transmitted from this interface.
MplsLspEgressStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatisticsTable Monitored class: mpls.DynamicLsp			
psbMatch	boolean	vRtrMplsLspStatsPSBMatch	The value of vRtrMplsLspStatsPSBMatch indicates if a path state block (PSB) match was made against this LSP name.
MplsLspIngressStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsLspStatisticsTable Monitored class: mpls.IngStatsPolicy			
psbMatch	boolean	vRtrMplsLspStatsPSBMatch	The value of vRtrMplsLspStatsPSBMatch indicates if a path state block (PSB) match was made against this LSP name.
P2MPInstanceStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsP2mpInstStatTable Monitored class: mpls.P2MPInstance			
configuredS2ls	long	vRtrMplsP2mpInstStatConfiguredS2ls	The value of vRtrMplsP2mpInstStatConfiguredS2ls indicates the number of S2ls configured for this P2MP LSP.
lastS2lChange	long	vRtrMplsP2mpInstStatLastS2lChange	The value of vRtrMplsP2mpInstStatLastS2lChange indicates the time since the last change occurred on this P2MP LSP.
lastS2lTimeDown	long	vRtrMplsP2mpInstStatLastS2lTimeDown	The value of vRtrMplsP2mpInstStatLastS2lTimeDown indicates the total time that this S2l has not been operational.
lastTrans	long	vRtrMplsP2mpInstStatLastTrans	The value of vRtrMplsP2mpInstStatLastTrans indicates the time since the last transition occurred on this P2mp instance.
operationalS2ls	long	vRtrMplsP2mpInstStatOperationalS2ls	The value of vRtrMplsP2mpInstStatOperationalS2ls indicates the number of operational S2ls for this P2MP LSP. This includes the S2ls currently active.

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5620 SAM counter name	Type	MIB counter name	Description
s2lChanges	long	vRtrMplsP2mpInstStatS2lChanges	The value of vRtrMplsP2mpInstStatS2lChanges indicates the number of S2l changes this P2MP LSP has had. For every S2l change (S2l down, S2l up, S2l change), a corresponding syslog/trap (if enabled) is generated for it.
s2lTimeUp	long	vRtrMplsP2mpInstStatLastS2lTimeUp	The value of vRtrMplsP2mpInstStatLastS2lTimeUp indicates the total time that this S2l has been operational.
timeDown	long	vRtrMplsP2mpInstStatTimeDown	The value of vRtrMplsP2mpInstStatTimeDown indicates the total time that this P2MP instance has not been operational.
timeUp	long	vRtrMplsP2mpInstStatTimeUp	The value of vRtrMplsP2mpInstStatTimeUp indicates the total time that this P2MP instance has been operational.
transitions	long	vRtrMplsP2mpInstStatTransitions	The The value of vRtrMplsP2mpInstStatTransitions indicates the number of state transitions (up -> down and down -> up) this P2mp instance has undergone.
S2LPathStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsS2lSubLspStatTable Monitored class: mpls.S2LPath			
cspfQueries	long	vRtrMplsS2lSubLspCspfQueries	The value of vRtrMplsS2lSubLspCspfQueries indicates the number of CSPF queries that have been made for this LSP S2l.
retryAttempts	long	vRtrMplsS2lSubLspRetryAttempts	The value of vRtrMplsS2lSubLspRetryAttempts indicates the number of unsuccessful attempts which have been made to signal this S2l. As soon as the S2l gets signalled, this is set to 0.
timeDown	long	vRtrMplsS2lSubLspTimeDown	The value of vRtrMplsS2lSubLspTimeUp indicates the total time that this LSP S2l has not been operational.
timeUp	long	vRtrMplsS2lSubLspTimeUp	The value of vRtrMplsS2lSubLspTimeUp indicates the total time that this LSP S2l has been operational. For example, the percentage up time can be determined by computing (vRtrMplsS2lSubLspTimeUp/vRtrMplsLspAge * 100).
transitionCount	long	vRtrMplsS2lSubLspTransitionCount	The value of vRtrMplsS2lSubLspTransitionCount indicates the number of transitions that have occurred for this LSP.
SiteStats MIB table name: TIMETRA-MPLS-MIB.vRtrMplsGeneralStatTable Monitored class: mpls.Site			

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5620 SAM counter name	Type	MIB counter name	Description
detourOriginate	long	vRtrMplsGeneralDetourLspOriginate	The value of vRtrMplsGeneralDetourLspOriginate indicates the number of detour LSPs that originate at this virtual router.
detourTerminate	long	vRtrMplsGeneralDetourLspTerminate	The value of vRtrMplsGeneralDetourLspTerminate indicates the number of detour LSPs that terminate at this virtual router.
detourTransit	long	vRtrMplsGeneralDetourLspTransit	The value of vRtrMplsGeneralDetourLspTransit indicates the number of detour LSPs that transit through this virtual router.
dynamicOriginate	long	vRtrMplsGeneralDynamicLspOriginate	The value of vRtrMplsGeneralDynamicLspOriginate indicates the number of dynamic LSPs that originate at this virtual router.
dynamicTerminate	long	vRtrMplsGeneralDynamicLspTerminate	The value of vRtrMplsGeneralDynamicLspTerminate indicates the number of dynamic LSPs that terminate at this virtual router.
dynamicTransit	long	vRtrMplsGeneralDynamicLspTransit	The value of vRtrMplsGeneralDynamicLspTransit indicates the number of dynamic LSPs that transit through this virtual router.
staticOriginate	long	vRtrMplsGeneralStaticLspOriginate	The value of vRtrMplsGeneralStaticLspOriginate indicates the number of static LSPs that originate at this virtual router.
staticTerminate	long	vRtrMplsGeneralStaticLspTerminate	The value of vRtrMplsGeneralStaticLspTerminate indicates the number of static LSPs that terminate at this virtual router.
staticTransit	long	vRtrMplsGeneralStaticLspTransit	The value of vRtrMplsGeneralStaticLspTransit indicates the number of static LSPs that transit through this virtual router.

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Table I-24 msdp statistics

5620 SAM counter name	Type	MIB counter name	Description
PeerStats MIB table name: TIMETRA-MSDP-MIB.tmnxMsdpPeerStatsTable Monitored classes: • msdp.Peer • msdp.GroupPeer			
errorMsgsReceived	long	tmnxMsdpPeerStatsErrorMsgsRecvd	The value of tmnxMsdpPeerStatsErrorMsgsRecvd indicates number of error messages received.

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5620 SAM counter name	Type	MIB counter name	Description
keepAliveMsgsReceived	long	tmnxMsdpPeerStatsKAMsgsRecvd	The value of tmnxMsdpPeerStatsKAMsgsRecvd indicates the number of keep-alive messages received.
keepAliveMsgsSent	long	tmnxMsdpPeerStatsKAMsgsSent	The value of tmnxMsdpPeerStatsKAMsgsSent indicates the number of keep-alive messages sent.
lastMsgPeer	long	tmnxMsdpPeerStatsLastMsgPeer	The value of tmnxMsdpPeerStatsLastMsgPeer indicates how long ago the last message was received from this peer instance.
lastStateChange	long	tmnxMsdpPeerStatsLastStChange	The value of tmnxMsdpPeerStatsLastStChange indicates how long ago the peer state changed.
peerTimeouts	long	tmnxMsdpPeerStatsPeerTimeouts	The value of tmnxMsdpPeerStatsPeerTimeouts indicates the number of peer timeouts.
remoteCloses	long	tmnxMsdpPeerStatsRemoteCloses	The value of tmnxMsdpPeerStatsRemoteCloses indicates the number of times the remote peer closed.
reservedMsgsReceived	long	tmnxMsdpPeerStatsResvMsgsRecvd	The value of tmnxMsdpPeerStatsResvMsgsRecvd indicates the number of MSDP messages received with type 'Reserved'.
rpfFailures	long	tmnxMsdpPeerStatsRPFFailures	The value of tmnxMsdpPeerStatsRPFFailures indicates number of reverse path forwarding (RPF) failures.
saLearned	long	tmnxMsdpPeerStatsSALearnt	The value of tmnxMsdpPeerStatsSALearnt indicates the number of unique source active entries in the cache learned from the peer.
saLimitExceeded	long	tmnxMsdpPeerStatsActSrcLimExcd	The value of tmnxMsdpPeerStatsActSrcLimExcd indicates the number of times the global active source limit has been exceeded by this peer instance.
saMsgsReceived	long	tmnxMsdpPeerStatsSAMsgsRecvd	The value of tmnxMsdpPeerStatsSAMsgsRecvd indicates the number of source-active messages received.
saMsgsSent	long	tmnxMsdpPeerStatsSAMsgsSent	The value of tmnxMsdpPeerStatsSAMsgsSent indicates the number of source-active messages sent.
saRejectExportPolicy	long	tmnxMsdpPeerStatsSARejImpPolicy	The value of tmnxMsdpPeerStatsSARejImpPolicy indicates the number of source active messages from the peer that were rejected due to import policy.

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5620 SAM counter name	Type	MIB counter name	Description
saRejectImportPolicy	long	tmnxMsdpPeerStatsSARejExpPolicy	The value of tmnxMsdpPeerStatsSARejExpPolicy indicates the number of source active messages from the peer that were not sent due to export policy.
saRequestMsgsReceived	long	tmnxMsdpPeerStatsSAReqMsgsRecvd	The value of tmnxMsdpPeerStatsSAReqMsgsRecvd indicates the number of source-active request messages received.
saRequestMsgsSent	long	tmnxMsdpPeerStatsSAReqMsgsSent	The value of tmnxMsdpPeerStatsSAReqMsgsSent indicates the number of source-active request messages sent.
saResponseMsgsReceived	long	tmnxMsdpPeerStatsSAResMsgsRecvd	The value of tmnxMsdpPeerStatsSAResMsgsRecvd indicates the number of source-active response messages received.
saResponseMsgsSent	long	tmnxMsdpPeerStatsSAResMsgsSent	The value of tmnxMsdpPeerStatsSAResMsgsSent indicates the number of source-active response messages sent.
unknownMsgsReceived	long	tmnxMsdpPeerStatsUnknMsgsRecvd	The value of tmnxMsdpPeerStatsUnknMsgsRecvd indicates the number of unknown messages received.

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Table I-25 multicast statistics

5620 SAM counter name	Type	MIB counter name	Description
McastCacChannelServiceStats MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacServStatsTable Monitored class: multicast.McastCacPolicy			
action	int	tmnxMcacServStatsAction	The value of tmnxMcacServStatsAction indicates the action specified by the mcac policy for the service application to act upon.
algorithmReapply	boolean	tmnxMcacServStatsAlgoReapply	The value of tmnxMcacServStatsAlgoReapply indicates if the mcac policy was reapplied on the already accepted channel due lag constraints or if this was the first request for this channel from the service application.
bundleAvailBw	long	tmnxMcacServStatsBundleAvailBW	The value of tmnxMcacServStatsBundleAvailBW indicates the available bundle bandwidth after the requested channel was either accepted or discarded by the mcac policy.

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5620 SAM counter name	Type	MIB counter name	Description
channelBw	long	tmnxMcacServStatsChannelBW	The value of tmnxMcacServStatsChannelBW indicates the channel bandwidth configured at the mcac policy at the time of request from the service application.
channelRequestCount	long	tmnxMcacServStatsApplyAttempts	The value of tmnxMcacServStatsApplyAttempts indicates the number of times the mcac policy was applied for a particular channel entry by the service application.
channelType	int	tmnxMcacServStatsChannelType	The value of tmnxMcacServStatsChannelType indicates the channel type configured at the mcac policy at the time of request from the service application.
encapValueOrVCId	String	tmnxMcacServStatsEncapValue	The value of tmnxMcacServStatsEncapValue indicates the SAP/SDP Encap value of which the mcac policy is applied.
interfaceAvailBw	long	tmnxMcacServStatsIntfAvailBW	The value of tmnxMcacServStatsIntfAvailBW indicates the available interface bandwidth after the requested channel was either accepted or discarded by the mcac policy.
portIdOrTunnelId	String	tmnxMcacServStatsPortId	The value of tmnxMcacServStatsPortId indicates the port Id of the SAP/SDP on which the mcac policy is applied.
reason	int	tmnxMcacServStatsReason	The value of tmnxMcacServStatsReason indicates the reason for the action specified by the mcac policy for the service application to act upon.
timeStamp	long	tmnxMcacServStatsTimeStamp	The value of tmnxMcacServStatsTimeStamp indicates the timestamp of the last time the mcac policy was applied for this channel entry.
McastCacChannelStats MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacStatsTable Monitored class: multicast.McastCacPolicy			
action	int	tmnxMcacStatsAction	The value of tmnxMcacStatsAction indicates the action specified by the mcac policy for the application interface to act upon.
algorithmReapply	boolean	tmnxMcacStatsAlgoReapply	The value of tmnxMcacStatsAlgoReapply indicates if the mcac policy was reapplied on the already accepted channel due lag constraints or if this was the first request for this channel from the application.
bundleAvailBw	long	tmnxMcacStatsBundleAvailBW	The value of tmnxMcacStatsBundleAvailBW indicates the available bundle bandwidth after the requested channel was either accepted or discarded by the mcac policy.

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5620 SAM counter name	Type	MIB counter name	Description
bundleName	String	tmnxMcacStatsBundleName	The value of tmnxMcacStatsBundleName indicates the name of the multicast CAC policy bundle. The value of tmnxMcacStatsBundleName could be an empty string, meaning that this particular statistics entry's channel did not belong to any bundle in the policy.
channelAddress	String	tmnxMcacStatsChlAddr	The value of tmnxMcacStatsChlAddr indicates the address of the multicast channel that mcac policy was applied upon when requested by the application interface. Address type is indicated by tmnxMcacStatsChlAddrType.
channelAddressType	int	tmnxMcacStatsChlAddrType	The value of tmnxMcacStatsChlAddrType indicates the address type of tmnxMcacStatsChlAddr.
channelBw	long	tmnxMcacStatsChannelBW	The value of tmnxMcacStatsChannelBW indicates the channel bandwidth configured at the mcac policy at the time of request from the application interface.
channelRequestCount	long	tmnxMcacStatsApplyAttempts	The value of tmnxMcacStatsApplyAttempts indicates the number of times the mcac policy was applied for a particular channel entry by the application.
channelType	int	tmnxMcacStatsChannelType	The value of tmnxMcacStatsChannelType indicates the channel type configured at the mcac policy at the time of request from the application interface.
interfaceAvailBw	long	tmnxMcacStatsIntfAvailBW	The value of tmnxMcacStatsIntfAvailBW indicates the available interface bandwidth after the requested channel was either accepted or discarded by the mcac policy.
interfaceId	long	tmnxMcacStatsIfIndex	The value of tmnxMcacStatsIfIndex indicates the application interface index that has applied mcac policy.
protocolName	int	tmnxMcacStatsProtocolIndex	The value of tmnxMcacStatsProtocolIndex indicates the application that has applied mcac policy.
reason	int	tmnxMcacStatsReason	The value of tmnxMcacStatsReason indicates the reason for the action specified by the mcac policy for the application interface to act upon.
timeStamp	long	tmnxMcacStatsTimeStamp	The value of tmnxMcacStatsTimeStamp indicates the timestamp of the last time the mcac policy was applied for this channel entry.
McastCacOper MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacOperTable Monitored class: multicast.McastCacPolicy			
activeChannels	long	tmnxMcacOperActiveChannels	The value of tmnxMcacOperActiveChannels indicates the number of active channels for this entry.

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5620 SAM counter name	Type	MIB counter name	Description
availMandBw	long	tmnxMcacOperAvailMandBw	The value of tmnxMcacOperAvailMandBw indicates the operational pre-reserved bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this protocol interface instance.
availOptionalBw	long	tmnxMcacOperAvailOptnlBw	The value of tmnxMcacOperAvailOptnlBw indicates the operational available bandwidth in kilo-bits per second(kbps) on the bundle for this protocol interface instance.
currConstrtLvl	long	tmnxMcacOperCurrConstrtLvl	The value of tmnxMcacOperCurrConstrtLvl indicates the current lag constraints bundle level id for the number of ports down (tmnxMcacOperPortsDown). This value is used to index the table tmnxMcacLevelTable to get the bundle level bandwidth.
inUseMandBw	long	tmnxMcacOperInUseMandBw	The value of tmnxMcacOperInUseMandBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this protocol interface instance.
inUseOptionalBw	long	tmnxMcacOperInUseOptnlBw	The value of tmnxMcacOperInUseOptnlBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the optional channels on the bundle for this protocol interface instance.
maxBw	long	tmnxMcacOperMaxBw	The value of tmnxMcacOperMaxBw indicates the operational maximum bandwidth in kilo-bits per second(kbps) on the bundle for this protocol interface instance.
portsDown	long	tmnxMcacOperPortsDown	The value of tmnxMcacOperPortsDown indicates the the number of ports down on the application interface. This value is used to index the table tmnxMcacLagTable to get the bundle level id.
valuesInTransit	boolean	tmnxMcacOperValuesInTransit	The value of tmnxMcacOperValuesInTransit indicates that the operational (available and in-use mandatory/optional) value for the following objects are in transition due to configuration change: tmnxMcacOperAvailOptnlBw tmnxMcacOperAvailMandBw tmnxMcacOperInUseMandBw tmnxMcacOperInUseOptnlBw When Multicast CAC Policy is applied on the interface for the join of the next channel, the operational values will be recalculated and applied to the above objects and the value for tmnxMcacOperValuesInTransit will be set to 'false'. If the value of tmnxMcacOperValuesInTransit is 'true' then the values are in transition.

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5620 SAM counter name	Type	MIB counter name	Description
McastCacServOperStats MIB table name: TIMETRA-MCAST-CAC-MIB.tmnxMcacServOperTable Monitored class: multicast.McastCacPolicy			
activeChannels	long	tmnxMcacServOperActiveChannels	The value of tmnxMcacServOperActiveChannels indicates the number of active channels for this entry.
availMandBw	long	tmnxMcacServOperAvailMandBw	The value of tmnxMcacServOperAvailMandBw indicates the operational pre-reserved bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this service application on sap/sdp instance.
availOptionalBw	long	tmnxMcacServOperAvailOptnlBw	The value of tmnxMcacServOperAvailOptnlBw indicates the operational available bandwidth in kilo-bits per second(kbps) on the bundle for this service application on sap/sdp instance.
currConstrtLvl	long	tmnxMcacServOperCurrConstrtLvl	The value of tmnxMcacServOperCurrConstrtLvl indicates the current lag constraints bundle level id for the number of ports down (tmnxMcacServOperPortsDown). This value is used to index the table tmnxMcacLevelTable to get the bundle level bandwidth.
inUseMandBw	long	tmnxMcacServOperInUseMandBw	The value of tmnxMcacServOperInUseMandBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the mandatory channels on the bundle for this service application on sap/sdp instance.
inUseOptionalBw	long	tmnxMcacServOperInUseOptnlBw	The value of tmnxMcacServOperInUseOptnlBw indicates the operational in-use bandwidth in kilo-bits per second(kbps) for the optional channels on the bundle for this service application on sap/sdp instance.
maxBw	long	tmnxMcacServOperMaxBw	The value of tmnxMcacServOperMaxBw indicates the operational maximum bandwidth in kilo-bits per second(kbps) on the bundle for this service application on sap/sdp instance.
portsDown	long	tmnxMcacServOperPortsDown	The value of tmnxMcacServOperPortsDown indicates the the number of ports down on the service application on sap/sdp. This value is used to index the table tmnxMcacLagTable to get the bundle level id.

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5620 SAM counter name	Type	MIB counter name	Description
valuesInTransit	boolean	tmnxMcacServOperValuesInTransit	The value of tmnxMcacServOperValuesInTransit indicates that the operational (available and in-use mandatory/optional) value for the following objects are in transition due to configuration change: tmnxMcacServOperAvailOptnlBw tmnxMcacServOperAvailMandBw tmnxMcacServOperInUseMandBw tmnxMcacServOperInUseOptnlBw When Multicast CAC Policy is applied on the sap/sdp for the join of the next channel, the operational values will be recalculated and applied to the above objects and the value for tmnxMcacServOperValuesInTransit will be set to 'false'. If the value of tmnxMcacServOperValuesInTransit is 'true' then the values are in transition.

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Table I-26 multichassis statistics

5620 SAM counter name	Type	MIB counter name	Description
MultiChassisPeerRingStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcrPeerStatsTable Monitored class: multichassis.Peer			
keepAlivePacketsTransmitted	long	tmnxMcrPeerStatsTxKeepAlive	The value of tmnxMcrPeerStatsTxKeepAlive indicates how many valid MC-Ring control packets of type 'keepalive' were transmitted to the peer.
mcsIdRequestPacketsReceived	long	tmnxMcrPeerStatsRxMcsIdReq	The value of tmnxMcrPeerStatsRxMcsIdReq indicates how many valid MCS ID requests were received from the peer.
mcsIdRequestPacketsTransmitted	long	tmnxMcrPeerStatsTxMcsIdReq	The value of tmnxMcrPeerStatsTxMcsIdReq indicates how many valid MCS ID requests were transmitted to the peer.
mcsIdResponsePacketsReceived	long	tmnxMcrPeerStatsRxMcsIdRsp	The value of tmnxMcrPeerStatsRxMcsIdRsp indicates how many valid MCS ID responses were received from the peer.
mcsIdResponsePacketsTransmitted	long	tmnxMcrPeerStatsTxMcsIdRsp	The value of tmnxMcrPeerStatsTxMcsIdRsp indicates how many valid MCS ID responses were transmitted to the peer.
ringExistsRequestPacketsReceived	long	tmnxMcrPeerStatsRxRingExistsReq	The value of tmnxMcrPeerStatsRxRingExistsReq indicates how many valid 'ring exists' requests were received from the peer.

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5620 SAM counter name	Type	MIB counter name	Description
ringExistsRequestPacketsTransmitted	long	tmnxMcrPeerStatsTxRingExistsReq	The value of tmnxMcrPeerStatsTxRingExistsReq indicates how many valid 'ring exists' requests were transmitted to the peer.
ringExistsResponsePacketsReceived	long	tmnxMcrPeerStatsRxRingExistsRsp	The value of tmnxMcrPeerStatsRxRingExistsRsp indicates how many valid 'ring exists' responses were received from the peer.
ringExistsResponsePacketsTransmitted	long	tmnxMcrPeerStatsTxRingExistsRsp	The value of tmnxMcrPeerStatsTxRingExistsRsp indicates how many valid 'ring exists' responses were transmitted to the peer.
ringKeepAlivePacketsReceived	long	tmnxMcrPeerStatsRxKeepAlive	The value of tmnxMcrPeerStatsRxKeepAlive indicates how many valid MC-Ring control packets of type 'keepalive' were received from the peer.
ringSignallingPacketsReceived	long	tmnxMcrPeerStatsRx	The value of tmnxMcrPeerStatsRx indicates how many valid MC-Ring signalling messages were received from the peer.
ringSignallingPacketsTransmitted	long	tmnxMcrPeerStatsTx	The value of tmnxMcrPeerStatsTx indicates how many valid MC-Ring signalling messages were transmitted to the peer.
MultiChassisRingNodeStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcrRingNodeStatsTable Monitored class: multichassis.MultiChassisRingNode			
detectedPacketsAcknowledged	long	tmnxMcrRingNodeStatsTxDetectAck	The value of tmnxMcrRingNodeStatsTxDetectAck indicates how many valid 'detected ring node' signalling messages were acknowledged to the peer for this multi-chassis ring node.
detectedPacketsPeerAcknowledged	long	tmnxMcrRingNodeStatsRxDetectAck	The value of tmnxMcrRingNodeStatsRxDetectAck indicates how many valid 'detected ring node' signalling messages were acknowledged by the peer for this multi-chassis ring node.
detectedPacketsReceived	long	tmnxMcrRingNodeStatsRxDetect	The value of tmnxMcrRingNodeStatsRxDetect indicates how many valid 'detected ring node' signalling messages were received from the peer for this multi-chassis ring node.
detectedPacketsTransmitted	long	tmnxMcrRingNodeStatsTxDetect	The value of tmnxMcrRingNodeStatsTxDetect indicates how many valid 'detected ring node' signalling messages were transmitted to the peer for this multi-chassis ring node.
rncvPacketsReceived	long	tmnxMcrRingNodeStatsRncvRxResp	The value of tmnxMcrRingNodeStatsRncvRxResp indicates how many valid connectivity verification messages were received from this multi-chassis ring node.

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5620 SAM counter name	Type	MIB counter name	Description
rncvPacketsRoundTripTime	long	tmnxMcrRingNodeStatsRncvRtTime	The value of tmnxMcrRingNodeStatsRncvRtTime indicates the round-trip-time of the last successful connectivity verification for this multi-chassis ring node. If there has not been a successful connectivity verification, the value of tmnxMcrRingNodeStatsRncvRtTime is zero.
rncvPacketsTransmitted	long	tmnxMcrRingNodeStatsRncvTxReq	The value of tmnxMcrRingNodeStatsRncvTxReq indicates how many valid connectivity verification messages were transmitted to this multi-chassis ring node.
MultiChassisRingStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcrRingStatsTable Monitored class: multichassis.MultiChassisRing			
opaquePacketsReceivedDelivered	long	tmnxMcrRingStatsRxOpaqueDelivrd	The value of tmnxMcrRingStatsRxOpaqueDelivrd indicates how many valid opaque signalling messages were received from the peer and delivered for this multi-chassis ring.
opaquePacketsReceivedNoDestination	long	tmnxMcrRingStatsRxOpaqueNoDest	The value of tmnxMcrRingStatsRxOpaqueNoDest indicates how many valid opaque signalling messages were received from the peer and for which no destination could be found.
opaquePacketsTransmitted	long	tmnxMcrRingStatsTxOpaque	The value of tmnxMcrRingStatsTxOpaque indicates how many valid opaque signalling messages were transmitted to the peer for this multi-chassis ring.
sapsChangedPacketsReceived	long	tmnxMcrRingStatsRxSapsChanged	The value of tmnxMcrRingStatsRxSapsChanged indicates how many valid 'SAPs changed info' signalling messages were received from the peer for this multi-chassis ring.
sapsChangedPacketsTransmitted	long	tmnxMcrRingStatsTxSapsChanged	The value of tmnxMcrRingStatsTxSapsChanged indicates how many valid 'SAPs changed info' signalling messages were transmitted to the peer for this multi-chassis ring.
PeerStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcLagPeerStatsTable Monitored class: multichassis.Peer			
configPacketsReceived	long	tmnxMcLagPeerStatsPktsRxConfig	The value of tmnxMcLagPeerStatsPktsRxConfig indicates how many valid MC-Lag control packets of type lag config were received on this system from the peer.

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5620 SAM counter name	Type	MIB counter name	Description
failedMD5AuthenticationPacketsDropped	long	tmnxMcLagPeerStatsDropMD5	The value of tmnxMcLagPeerStatsDropMD5 indicates how many MC-Lag control packets were dropped on this system from the peer because the packet failed MD5 authentication.
failedPacketsTransmitted	long	tmnxMcLagPeerStatsPktsTxFailed	The value of tmnxMcLagPeerStatsPktsTxFailed indicates how many MC-Lag control packets failed to be transmitted from this system to the peer.
invalidLagIdPacketsDropped	long	tmnxMcLagPeerStatsDropTlvInvldId	The value of tmnxMcLagPeerStatsDropTlvInvldId indicates how many MC-Lag control packets were dropped on this system from the peer because the packet referred to an invalid or non multi-chassis lag.
invalidSizePacketsDropped	long	tmnxMcLagPeerStatsDropTlvInvldSz	The value of tmnxMcLagPeerStatsDropTlvInvldSz indicates how many MC-Lag control packets were dropped on this system from the peer because the packet size was invalid.
keepAlivePacketsReceived	long	tmnxMcLagPeerStatsPktsRxKpalive	The value of tmnxMcLagPeerStatsPktsRxKpalive indicates how many valid MC-Lag control packets of type keepalive were received on this system from the peer.
keepalivePacketsTransmitted	long	tmnxMcLagPeerStatsPktsTxKpalive	The value of tmnxMcLagPeerStatsPktsTxKpalive indicates how many MC-Lag control packets of type keepalive were transmitted from this system to the peer.
outOfSequencePacketsDropped	long	tmnxMcLagPeerStatsDropOutOfSeq	The value of tmnxMcLagPeerStatsDropOutOfSeq indicates how many MC-Lag control packets were dropped on this system from the peer because the packet was out of sequence.
packetsReceived	long	tmnxMcLagPeerStatsPktsRx	The value of tmnxMcLagPeerStatsPktsRx indicates how many valid MC-Lag control packets were received on this system from the peer.
packetsTransmitted	long	tmnxMcLagPeerStatsPktsTx	The value of tmnxMcLagPeerStatsPktsTx indicates how many MC-Lag control packets were transmitted from this system to the peer.
peerConfigPacketsReceived	long	tmnxMcLagPeerStatsPktsRxPeerCfg	The value of tmnxMcLagPeerStatsPktsRxPeerCfg indicates how many valid MC-Lag control packets of type peer config were received on this system from the peer.
peerConfigPacketsTransmitted	long	tmnxMcLagPeerStatsPktsTxPeerCfg	The value of tmnxMcLagPeerStatsPktsTxPeerCfg indicates how many MC-Lag control packets of type peer config were transmitted from this system to the peer.

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5620 SAM counter name	Type	MIB counter name	Description
stateDisabledPacketsDropped	long	tmnxMcLagPeerStatsDropStateDsbld	The value of tmnxMcLagPeerStatsDropStateDsbld indicates how many MC-Lag control packets were dropped on this system from the peer because the peer was administratively disabled.
statePacketsReceived	long	tmnxMcLagPeerStatsPktsRxState	The value of tmnxMcLagPeerStatsPktsRxState indicates how many valid MC-Lag control packets of type lag state were received on this system from the peer.
tooShortPacketsDropped	long	tmnxMcLagPeerStatsDropPktTooShrt	The value of tmnxMcLagPeerStatsDropPktTooShrt indicates how many MC-Lag control packets were dropped on this system from the peer because the packet was too short.
unknownTlvPacketsDropped	long	tmnxMcLagPeerStatsDropUnknownTlv	The value of tmnxMcLagPeerStatsDropUnknownTlv indicates how many MC-Lag control packets were dropped on this system from the peer because the packet contained an unknown TLV.
PeerSynchronizationProtocolStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxMcPeerSyncStatsTable Monitored class: multichassis.PeerSynchronizationProtocol			
bodyDecodeErrorPacketsReceived	long	tmnxMcPeerSyncPktsRxErrBody	The value of tmnxMcPeerSyncPktsRxErrBody indicates the number of packets with body decode errors received from the multi-chassis peer.
dataPacketsReceived	long	tmnxMcPeerSyncPktsRxData	The value of tmnxMcPeerSyncPktsRxData indicates the number of hello packets received from the multi-chassis peer.
dataPacketsTransmitted	long	tmnxMcPeerSyncPktsTxData	The value of tmnxMcPeerSyncPktsTxData indicates the number of data packets transmitted to the multi-chassis peer.
erroneousPacketsReceived	long	tmnxMcPeerSyncPktsRxErr	The value of tmnxMcPeerSyncPktsRxErr indicates the number of erroneous packets received from the multi-chassis peer.
headerDecodeErrorPacketsReceived	long	tmnxMcPeerSyncPktsRxErrHeader	The value of tmnxMcPeerSyncPktsRxErrHeader indicates the number of packets with header decode errors received from the multi-chassis peer.
helloPacketsReceived	long	tmnxMcPeerSyncPktsRxHello	The value of tmnxMcPeerSyncPktsRxHello indicates the number of hello packets received from the multi-chassis peer.
helloPacketsTransmitted	long	tmnxMcPeerSyncPktsTxHello	The value of tmnxMcPeerSyncPktsTxHello indicates the number of hello packets transmitted to the multi-chassis peer.

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5620 SAM counter name	Type	MIB counter name	Description
otherPacketsReceived	long	tmnxMcPeerSyncPktsRxOther	The value of tmnxMcPeerSyncPktsRxOther indicates the number of all other packet types received from the multi-chassis peer.
otherPacketsTransmitted	long	tmnxMcPeerSyncPktsTxOther	The value of tmnxMcPeerSyncPktsTxOther indicates the number of all other packet types transmitted to the multi-chassis peer.
packetTransmissionErrors	long	tmnxMcPeerSyncPktsTxErr	The value of tmnxMcPeerSyncPktsTxErr indicates the number of packet transmission errors.
sequenceNumberErrorPacketsReceived	long	tmnxMcPeerSyncPktsRxErrSeqNum	The value of tmnxMcPeerSyncPktsRxErrSeqNum indicates the number of packets with sequence number errors received from the multi-chassis peer.
totalPacketsReceived	long	tmnxMcPeerSyncPktsRxAll	The value of tmnxMcPeerSyncPktsRxAll indicates the total number of packets received from the multi-chassis peer.
totalPacketsTransmitted	long	tmnxMcPeerSyncPktsTxAll	The value of tmnxMcPeerSyncPktsTxAll indicates the total number of packets transmitted to the multi-chassis peer.

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5620 SAM counter name	Type	MIB counter name	Description
AreaBasicStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfAreaTable Monitored class: ospf.AreaSite			
nssaTranslatorEvents	long	tmnxOspfAreaNssaTranslatorEvents	The value of tmnxOspfAreaNssaTranslatorEvents indicates the number of Translator State changes that have occurred since the last boot-up.
totalLSACount	long	tmnxOspfAreaScopeLsaCount	The value of tmnxOspfAreaScopeLsaCount indicates the total number of Area-Scope link state advertisements in this area's link-state database.
totalSpfRuns	long	tmnxOspfAreaSpfRuns	The value of tmnxOspfAreaSpfRuns indicates the number of times that the intra-area route table has been calculated using this area's link-state database. This is typically done using Dijkstra's algorithm.
totalUnknownLSACount	long	tmnxOspfAreaScopeUnkLsaCount	The value of tmnxOspfAreaScopeUnkLsaCount indicates the total number of unknown Area-Scope link-state advertisements in this area's link-state database.

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5620 SAM counter name	Type	MIB counter name	Description
InterfaceGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
events	long	tmnxOspfIfEvents	The value of tmnxOspfIfEvents indicates the number of times this OSPF interface has changed its state, or an error has occurred.
InterfaceReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF Database Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
lsasWithBadChecksums	long	tmnxOspfIfRxBadChecksums	The value of tmnxOspfIfRxBadChecksums indicates the count of LSAs received with bad checksums.
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
authorizationFailures	long	tmnxOspfIfAuthFailures	The value of tmnxOspfIfAuthFailures indicates the total number of OSPF packets received with an invalid authorization key since tmnxOspfAdminState was last set to 'enabled'.
badAreas	long	tmnxOspfIfBadAreas	The value of tmnxOspfIfBadAreas indicates the total number of OSPF packets received with an area mismatch since tmnxOspfAdminState was last set to 'enabled'.
badAuthorizationTypes	long	tmnxOspfIfBadAuthTypes	The value of tmnxOspfIfBadAuthTypes indicates the total number of OSPF packets received with an invalid authorization type since tmnxOspfAdminState was last set to 'enabled'.
badDeadIntervals	long	tmnxOspfIfBadDeadIntervals	The value of tmnxOspfIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badDestinationAddresses	long	tmnxOspfIfBadDstAddrs	The value of tmnxOspfIfBadDstAddrs indicates the total number of OSPF packets received with the incorrect IP destination address since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badHelloIntervals	long	tmnxOspfIfBadHelloIntervals	The value of tmnxOspfIfBadHelloIntervals indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this interface since tmnxOspfAdminState was last set to 'enabled'.
badLengths	long	tmnxOspfIfBadLengths	The value of tmnxOspfIfBadLengths indicates the total number of OSPF packets received on this interface with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.
badNeighbors	long	tmnxOspfIfBadNeighbors	The value of tmnxOspfIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the information this router has for the neighbor since tmnxOspfAdminState was last set to 'enabled'.
badNetworks	long	tmnxOspfIfBadNetworks	The value of tmnxOspfIfBadNetworks indicates the total number of OSPF packets received with invalid network or mask since tmnxOspfAdminState was last set to 'enabled'.
badOptions	long	tmnxOspfIfBadOptions	The value of tmnxOspfIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this interface or area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfIfBadPacketTypes	The value of tmnxOspfIfBadPacketTypes indicates the total number of OSPF packets received with an invalid OSPF packet type since tmnxOspfAdminState was last set to 'enabled'.
badVersions	long	tmnxOspfIfBadVersions	The value of tmnxOspfIfBadVersions indicates the total number of OSPF packets received with bad OSPF version numbers since tmnxOspfAdminState was last set to 'enabled'.
badVirtualLinks	long	tmnxOspfIfBadVirtualLinks	The value of tmnxOspfIfBadVirtualLinks indicates the total number of OSPF packets received on this interface that are destined to a virtual link that does not exist since tmnxOspfAdminState was last set to 'enabled'.
discardPackets	long	tmnxOspfIfDiscardPackets	The value of tmnxOspfIfDiscardPackets indicates the total number of OSPF packets discarded on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
retransmitOuts	long	tmnxOspfIfRetransmitOuts	The value of tmnxOspfIfRetransmitOuts indicates the total number of OSPF Retransmits sent on this interface since tmnxOspfAdminState was last set to 'enabled'.
InterfaceTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfIfStatsTable Monitored class: ospf.Interface			
databaseDescriptionPackets	long	tmnxOspfIfRxDBDs	The value of tmnxOspfIfRxDBDs indicates the total number of OSPF Database Description packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfIfTxDBDs	The value of tmnxOspfIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfRxHellos	The value of tmnxOspfIfRxHellos indicates the total number of OSPF Hello packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfIfTxHellos	The value of tmnxOspfIfTxHellos indicates the total number of OSPF Hello packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfRxLSAcks	The value of tmnxOspfIfRxLSAcks indicates the total number of Link State Acknowledgements received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfIfTxLSAcks	The value of tmnxOspfIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfRxLSRs	The value of tmnxOspfIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfIfTxLSRs	The value of tmnxOspfIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs)transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfIfRxLSUs	The value of tmnxOspfIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateUpdates	long	tmnxOspfIfTxLSUs	The value of tmnxOspfIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfRxPackets	The value of tmnxOspfIfRxPackets indicates the total number of OSPF packets received on this interface since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfIfTxPackets	The value of tmnxOspfIfTxPackets indicates the total number of OSPF packets transmitted on this interface since tmnxOspfAdminState was last set to 'enabled'.
NeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			
events	long	tmnxOspfNbrEvents	The value of tmnxOspfNbrEvents indicates the number of times this neighbor relationship has changed state, or an error has occurred.
retransmissionQueueLength	long	tmnxOspfNbrLsRetransQLen	The value of tmnxOspfNbrLsRetransQLen indicates the current length of the retransmission queue.
NeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfNbrStatsTable Monitored class: ospf.Neighbor			
badMtus	long	tmnxOspfNbrBadMTUs	The value of tmnxOspfNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.
badNeighborStates	long	tmnxOspfNbrBadNbrStates	The value of tmnxOspfNbrBadNbrStates indicates the total number of OSPF packets received when the neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfNbrBadPackets	The value of tmnxOspfNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfNbrBadSeqNums	The value of tmnxOspfNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
duplicates	long	tmnxOspfNbrDuplicates	The value of tmnxOspfNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfNbrLsaInstallFailed	The value of tmnxOspfNbrLsaInstallFailed indicates the total number of times an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfNbrLsaNotInLsdbs	The value of tmnxOspfNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.
numberOfRestarts	long	tmnxOspfNbrNumRestarts	The value of tmnxOspfNbrNumRestarts indicates the number of times the neighbor has attempted restart.
optionMismatches	long	tmnxOspfNbrOptionMismatches	The value of tmnxOspfNbrOptionMismatches indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
ShamLinkGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamIfStatsTable Monitored class: ospf.ShamLink			
events	long	tmnxOspfShamIfEvents	The value of tmnxOspfShamIfEvents indicates the number of state changes or error events on this sham link.
ShamLinkNeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamNbrStatsTable Monitored class: ospf.ShamLinkNeighbor			
events	long	tmnxOspfShamNbrEvents	The value of tmnxOspfShamNbrEvents indicates the number of times this sham link has changed its state, or an error has occurred.
retransmissionQueueLength	long	tmnxOspfShamNbrLsRetransQLen	The value of tmnxOspfShamNbrLsRetransQLen indicates the current length of the retransmission queue.
ShamLinkNeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamNbrStatsTable Monitored class: ospf.ShamLinkNeighbor			
badMtus	long	tmnxOspfShamNbrBadMTUs	The value of tmnxOspfShamNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badPackets	long	tmnxOspfShamNbrBadPackets	The value of tmnxOspfShamNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfShamNbrBadSeqNums	The value of tmnxOspfShamNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
badVirtualNeighborStates	long	tmnxOspfShamNbrBadNbrStates	The value of tmnxOspfShamNbrBadNbrStates indicates the total number of OSPF packets received when the sham link neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
duplicates	long	tmnxOspfShamNbrDuplicates	The value of tmnxOspfShamNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfShamNbrLsaInstallFail	The value of tmnxOspfShamNbrLsaInstallFail indicates the total number of times when an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfShamNbrLsaNotInLsdbs	The value of tmnxOspfShamNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.
numberOfRestarts	long	tmnxOspfShamNbrNumRestarts	The value of tmnxOspfShamNbrNumRestarts indicates the number of times the sham link neighbor has attempted restart since tmnxOspfAdminState was last set to 'enabled'.
optionMismatches	long	tmnxOspfShamNbrOptionMismatch	The value of tmnxOspfShamNbrOptionMismatch indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
ShamLinkReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamIfStatsTable Monitored class: ospf.ShamLink			

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5620 SAM counter name	Type	MIB counter name	Description
databaseDescriptionPackets	long	tmnxOspfShamIfRxDBDs	The value of tmnxOspfShamIfRxDBDs indicates the total number of OSPF Database Description packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfShamIfRxHellos	The value of tmnxOspfShamIfRxHellos indicates the total number of OSPF Hello packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfShamIfRxLSAcks	The value of tmnxOspfShamIfRxLSAcks indicates the total number of Link State Acknowledgements received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfShamIfRxLSRs	The value of tmnxOspfShamIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfShamIfRxLSUs	The value of tmnxOspfShamIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
lsasWithBadChecksums	long	tmnxOspfShamIfRxBadChecksums	The value of tmnxOspfShamIfRxBadChecksums indicates the count of LSAs received with bad checksums.
totalPackets	long	tmnxOspfShamIfRxPackets	The value of tmnxOspfShamIfRxPackets indicates the total number of OSPF packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
ShamLinkStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamIfStatsTable Monitored class: ospf.ShamLink			
authorizationFailures	long	tmnxOspfShamIfAuthFailures	The value of tmnxOspfShamIfAuthFailures indicates the total number of OSPF packets received with an invalid authorization key since tmnxOspfAdminState was last set to 'enabled'.
badAreas	long	tmnxOspfShamIfBadAreas	The value of tmnxOspfShamIfBadAreas indicates the total number of OSPF packets received with an area mismatch since tmnxOspfAdminState was last set to 'enabled'.
badAuthorizationTypes	long	tmnxOspfShamIfBadAuthTypes	The value of tmnxOspfShamIfBadAuthTypes indicates the total number of OSPF packets received with an invalid authorization type since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badDeadIntervals	long	tmnxOspfShamIfBadDeadIntervals	The value of tmnxOspfShamIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this sham link since tmnxOspfAdminState was last set to 'enabled'.
badDestinationAddresses	long	tmnxOspfShamIfBadDstAddrs	The value of tmnxOspfShamIfBadDstAddrs indicates the total number of OSPF packets received with the incorrect IP destination address since tmnxOspfAdminState was last set to 'enabled'.
badHelloIntervals	long	tmnxOspfShamIfBadHelloIntervals	The value of tmnxOspfShamIfBadHelloIntervals indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this sham link since tmnxOspfAdminState was last set to 'enabled'.
badLengths	long	tmnxOspfShamIfBadLengths	The value of tmnxOspfShamIfBadLengths indicates the total number of OSPF packets received on this sham link with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.
badNeighbors	long	tmnxOspfShamIfBadNeighbors	The value of tmnxOspfShamIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the information this router has for the neighbor since tmnxOspfAdminState was last set to 'enabled'.
badNetworks	long	tmnxOspfShamIfBadNetworks	The value of tmnxOspfShamIfBadNetworks indicates the total number of OSPF packets received with invalid network or mask since tmnxOspfAdminState was last set to 'enabled'.
badOptions	long	tmnxOspfShamIfBadOptions	The value of tmnxOspfShamIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this sham link or area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfShamIfBadPacketTypes	The value of tmnxOspfShamIfBadPacketTypes indicates the total number of OSPF packets received with an invalid OSPF packet type since tmnxOspfAdminState was last set to 'enabled'.

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5620 SAM counter name	Type	MIB counter name	Description
badVersions	long	tmnxOspfShamIfBadVersions	The value of tmnxOspfShamIfBadVersions indicates the total number of OSPF packets received with bad OSPF version numbers since tmnxOspfAdminState was last set to 'enabled'.
discardPackets	long	tmnxOspfShamIfDiscardPackets	The value of tmnxOspfShamIfDiscardPackets indicates the total number of OSPF packets discarded on this sham link since tmnxOspfAdminState was last set to 'enabled'.
retransmitOuts	long	tmnxOspfShamIfRetransmitOuts	The value of tmnxOspfShamIfRetransmitOuts indicates the total number of OSPF Retransmits sent on this sham link since tmnxOspfAdminState was last set to 'enabled'.
ShamLinkTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfShamIfStatsTable Monitored class: ospf.ShamLink			
databaseDescriptionPackets	long	tmnxOspfShamIfRxDBDs	The value of tmnxOspfShamIfRxDBDs indicates the total number of OSPF Database Description packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
databaseDescriptionPackets	long	tmnxOspfShamIfTxDBDs	The value of tmnxOspfShamIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfShamIfRxHellos	The value of tmnxOspfShamIfRxHellos indicates the total number of OSPF Hello packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
helloPackets	long	tmnxOspfShamIfTxHellos	The value of tmnxOspfShamIfTxHellos indicates the total number of OSPF Hello packets transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfShamIfRxLSAcks	The value of tmnxOspfShamIfRxLSAcks indicates the total number of Link State Acknowledgements received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateAcknowledgements	long	tmnxOspfShamIfTxLSAcks	The value of tmnxOspfShamIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateRequests	long	tmnxOspfShamIfRxLSRs	The value of tmnxOspfShamIfRxLSRs indicates the total number of Link State Requests (LSRs) received on this sham link since tmnxOspfAdminState was last set to 'enabled'.

5620 SAM counter name	Type	MIB counter name	Description
linkStateRequests	long	tmnxOspfShamIfTxLSRs	The value of tmnxOspfShamIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfShamIfRxLSUs	The value of tmnxOspfShamIfRxLSUs indicates the total number of Link State Updates (LSUs) received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
linkStateUpdates	long	tmnxOspfShamIfTxLSUs	The value of tmnxOspfShamIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfShamIfRxPackets	The value of tmnxOspfShamIfRxPackets indicates the total number of OSPF packets received on this sham link since tmnxOspfAdminState was last set to 'enabled'.
totalPackets	long	tmnxOspfShamIfTxPackets	The value of tmnxOspfShamIfTxPackets indicates the total number of OSPF packets transmitted on this sham link since tmnxOspfAdminState was last set to 'enabled'.
SiteStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfStatisticsTable Monitored class: ospf.Site			
addRouteFailed	long	tmnxOspfRoutesAddsFailed	The value of tmnxOspfRoutesAddsFailed indicates the number of times an attempt to add a route to the Route Table Manager (RTM) failed for this OSPF instance.
cspfDroppedRequests	long	tmnxOspfCSPFDroppedRequests	The value of tmnxOspfCSPFDroppedRequests indicates the number of dropped CSPF requests made by the OSPF protocol.
cspfPathsFound	long	tmnxOspfCSPFPathsFound	The value of tmnxOspfCSPFPathsFound indicates the number of of paths found for the requests made to OSPF protocol.
cspfPathsNotFound	long	tmnxOspfCSPFPathsNotFound	The value of tmnxOspfCSPFPathsNotFound indicates the number of of paths not found for the requests made to OSPF protocol.
cspfRequests	long	tmnxOspfCSPFRequests	The value of tmnxOspfCSPFRequests indicates the number of CSPF requests made to the OSPF protocol.
deleteRouteFailed	long	tmnxOspfRoutesDelsFailed	The value of tmnxOspfRoutesDelsFailed indicates the number of times an attempt to delete a route from the Route Table Manager (RTM) failed for this instance of OSPF.
inOverflowCount	long	tmnxOspfNumTimesInOverflow	The value of tmnxOspfNumTimesInOverflow indicates the count of the number of times the system was in the overflow state.

5620 SAM counter name	Type	MIB counter name	Description
inOverloadCount	long	tmnxOspfNumTimesInOverload	The value of tmnxOspfNumTimesInOverload indicates the count of the number of times the system was overloaded.
modifyRouteFailed	long	tmnxOspfRoutesModsFailed	The value of tmnxOspfRoutesModsFailed indicates the number of times an attempt to modify a route in the Route Table Manager (RTM) failed for this instance of OSPF.
newLsasOriginated	long	tmnxOspfOriginateNewLsas	The value of tmnxOspfOriginateNewLsas indicates the number of new link-state advertisements that have been originated. This number is incremented each time the router originates a new LSA.
newLsasReceived	long	tmnxOspfRxNewLsas	The value of tmnxOspfRxNewLsas indicates the number of link-state advertisements received determined to be new instantiations. This number does not include newer instantiations of self-originated link-state advertisements.
spfAttemptsFailed	long	tmnxOspfSpfAttemptsFailed	The value of tmnxOspfSpfAttemptsFailed indicates the number of times an attempt to run SPF has failed because SPF runs have been stopped as a result of insufficient memory resources.
VirtualLinkGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
events	long	tmnxOspfVirtIfEvents	The value of tmnxOspfVirtIfEvents indicates the number of state changes or error events on this Virtual Link.
VirtualLinkReceiveStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
databaseDescriptionPackets	long	tmnxOspfVirtIfRxDBDs	The value of tmnxOspfVirtIfRxDBDs indicates the total number of OSPF Database Description packets received on this virtual interface.
databaseDescriptionPackets	long	tmnxOspfVirtIfTxDBDs	The value of tmnxOspfVirtIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this virtual interface.
helloPackets	long	tmnxOspfVirtIfRxHellos	The value of tmnxOspfVirtIfRxHellos indicates the total number of OSPF Hello packets received on this virtual interface.
helloPackets	long	tmnxOspfVirtIfTxHellos	The value of tmnxOspfVirtIfTxHellos indicates the total number of OSPF Hello packets transmitted on this virtual interface since it was created.
linkStateAcknowledgements	long	tmnxOspfVirtIfRxLSAcks	The value of tmnxOspfVirtIfRxLSAcks indicates the total number of Link State Acknowledgements received on this virtual interface.

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5620 SAM counter name	Type	MIB counter name	Description
linkStateAcknowledgements	long	tmnxOspfVirtIfTxLSAcks	The value of tmnxOspfVirtIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfRxLSRs	The value of tmnxOspfVirtIfRxLSRs indicates the total number of OSPF Link State Requests (LSRs) received on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfTxLSRs	The value of tmnxOspfVirtIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfRxLSUs	The value of tmnxOspfVirtIfRxLSUs indicates the total number of OSPF Link State Updates (LSUs) received on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfTxLSUs	The value of tmnxOspfVirtIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this virtual interface.
lsasWithBadChecksums	long	tmnxOspfVirtIfRxBadChecksums	The value of tmnxOspfVirtIfRxBadChecksums indicates the count of LSAs received with bad checksums.
totalPackets	long	tmnxOspfVirtIfRxPackets	The value of tmnxOspfVirtIfRxPackets indicates the total number of OSPF packets received on this virtual interface since it was created.
totalPackets	long	tmnxOspfVirtIfTxPackets	The value of tmnxOspfVirtIfTxPackets indicates the total number of OSPF packets transmitted on this virtual interface since it was created.
VirtualLinkStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			
authorizationFailures	long	tmnxOspfVirtIfAuthFailures	The value of tmnxOspfVirtIfAuthFailures indicates the total number of OSPF packets received on this virtual interface with invalid authentication keys.
badAreas	long	tmnxOspfVirtIfBadAreas	The value of tmnxOspfVirtIfBadAreas indicates the total number of OSPF packets received on this virtual interface with area mismatches.
badAuthorizationTypes	long	tmnxOspfVirtIfBadAuthTypes	The value of tmnxOspfVirtIfBadAuthTypes indicates the total number of OSPF packets received on this virtual interface with invalid authentication types.
badDeadIntervals	long	tmnxOspfVirtIfBadDeadIntervals	The value of tmnxOspfVirtIfBadDeadIntervals indicates the total number of OSPF packets received where the dead interval given in the packet was not equal to that configured on this virtual interface since tmnxOspfAdminState was last set to 'enabled'.

5620 SAM counter name	Type	MIB counter name	Description
badDestinationAddresses	long	tmnxOspfVirtIfBadDstAddrs	The value of tmnxOspfVirtIfBadDstAddrs indicates the total number of OSPF packets received on this virtual interface with invalid destination IP address.
badHelloIntervals	long	tmnxOspfVirtIfBadHelloIntervls	The value of tmnxOspfVirtIfBadHelloIntervls indicates the total number of OSPF packets received where the hello interval given in packet was not equal to that configured on this virtual interface since tmnxOspfAdminState was last set to 'enabled'.
badLengths	long	tmnxOspfVirtIfBadLengths	The value of tmnxOspfVirtIfBadLengths indicates the total number of OSPF packets received on this virtual interface with a total length not equal to the length given in the packet itself since tmnxOspfAdminState was last set to 'enabled'.
badNeighbors	long	tmnxOspfVirtIfBadNeighbors	The value of tmnxOspfVirtIfBadNeighbors indicates the total number of OSPF packets received where the neighbor information does not match the configuration this router has for the neighbor.
badNetworks	long	tmnxOspfVirtIfBadNetworks	The value of tmnxOspfVirtIfBadNetworks indicates the total number of OSPF packets received on this virtual interface with invalid network or mask fields.
badOptions	long	tmnxOspfVirtIfBadOptions	The value of tmnxOspfVirtIfBadOptions indicates the total number of OSPF packets received with an option that does not match those configured for this virtual interface or transit-area since tmnxOspfAdminState was last set to 'enabled'.
badPacketTypes	long	tmnxOspfVirtIfBadPacketTypes	The value of tmnxOspfVirtIfBadPacketTypes indicates the total number of OSPF packets received on this virtual interface with invalid OSPF packet types.
badVersions	long	tmnxOspfVirtIfBadVersions	The value of tmnxOspfVirtIfBadVersions indicates the total number of OSPF packets received on this virtual interface with invalid OSPF version numbers.
discardPackets	long	tmnxOspfVirtIfDiscardPackets	The value of tmnxOspfVirtIfDiscardPackets indicates the total number of OSPF packets discarded on this virtual interface.
retransmitOuts	long	tmnxOspfVirtIfRetransmitOuts	The value of tmnxOspfVirtIfRetransmitOuts indicates the total number of OSPF packets retransmitted on this virtual interface.
VirtualLinkTransmitStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtIfStatsTable Monitored class: ospf.VirtualLink			

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5620 SAM counter name	Type	MIB counter name	Description
databaseDescriptionPackets	long	tmnxOspfVirtIfRxDBDs	The value of tmnxOspfVirtIfRxDBDs indicates the total number of OSPF Database Description packets received on this virtual interface.
databaseDescriptionPackets	long	tmnxOspfVirtIfTxDBDs	The value of tmnxOspfVirtIfTxDBDs indicates the total number of OSPF Database Description packets transmitted on this virtual interface.
helloPackets	long	tmnxOspfVirtIfRxHellos	The value of tmnxOspfVirtIfRxHellos indicates the total number of OSPF Hello packets received on this virtual interface.
helloPackets	long	tmnxOspfVirtIfTxHellos	The value of tmnxOspfVirtIfTxHellos indicates the total number of OSPF Hello packets transmitted on this virtual interface since it was created.
linkStateAcknowledgements	long	tmnxOspfVirtIfRxLSAcks	The value of tmnxOspfVirtIfRxLSAcks indicates the total number of Link State Acknowledgements received on this virtual interface.
linkStateAcknowledgements	long	tmnxOspfVirtIfTxLSAcks	The value of tmnxOspfVirtIfTxLSAcks indicates the total number of OSPF Link State Acknowledgements transmitted on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfRxLSRs	The value of tmnxOspfVirtIfRxLSRs indicates the total number of OSPF Link State Requests (LSRs) received on this virtual interface.
linkStateRequests	long	tmnxOspfVirtIfTxLSRs	The value of tmnxOspfVirtIfTxLSRs indicates the total number of OSPF Link State Requests (LSRs) transmitted on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfRxLSUs	The value of tmnxOspfVirtIfRxLSUs indicates the total number of OSPF Link State Updates (LSUs) received on this virtual interface.
linkStateUpdates	long	tmnxOspfVirtIfTxLSUs	The value of tmnxOspfVirtIfTxLSUs indicates the total number of OSPF Link State Updates (LSUs) transmitted on this virtual interface.
totalPackets	long	tmnxOspfVirtIfRxPackets	The value of tmnxOspfVirtIfRxPackets indicates the total number of OSPF packets received on this virtual interface since it was created.
totalPackets	long	tmnxOspfVirtIfTxPackets	The value of tmnxOspfVirtIfTxPackets indicates the total number of OSPF packets transmitted on this virtual interface since it was created.
VirtualNeighborGeneralStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtNbrStatsTable Monitored class: ospf.VirtualNeighbor			
events	long	tmnxOspfVirtNbrEvents	The value of tmnxOspfVirtNbrEvents indicates the number of times this virtual link has changed its state, or an error has occurred.

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5620 SAM counter name	Type	MIB counter name	Description
retransmissionQueueLength	long	tmnxOspfVirtNbrLsRetransQLen	The value of tmnxOspfVirtNbrLsRetransQLen indicates the current length of the retransmission queue.
VirtualNeighborStatusStats MIB table name: TIMETRA-OSPF-NG-MIB.tmnxOspfVirtNbrStatsTable Monitored class: ospf.VirtualNeighbor			
badMtus	long	tmnxOspfVirtNbrBadMTUs	The value of tmnxOspfVirtNbrBadMTUs indicates the total number of times when the MTU in a received database description packet was larger than the MTU of the receiving interface since tmnxOspfAdminState was last set to 'enabled'.
badPackets	long	tmnxOspfVirtNbrBadPackets	The value of tmnxOspfVirtNbrBadPackets indicates the total number of times when an LS update was received with an illegal LS type or an option mismatch since tmnxOspfAdminState was last set to 'enabled'.
badSequenceNumbers	long	tmnxOspfVirtNbrBadSeqNums	The value of tmnxOspfVirtNbrBadSeqNums indicates the total number of times when a database description packet was received with a sequence number mismatch since tmnxOspfAdminState was last set to 'enabled'.
badVirtualNeighborStates	long	tmnxOspfVirtNbrBadNbrStates	The value of tmnxOspfVirtNbrBadNbrStates indicates the total number of OSPF packets received when the virtual neighbor state was not expecting to receive this packet type since tmnxOspfAdminState was last set to 'enabled'.
duplicates	long	tmnxOspfVirtNbrDuplicates	The value of tmnxOspfVirtNbrDuplicates indicates the total number of times when a duplicate database description packet was received during the Exchange state since tmnxOspfAdminState was last set to 'enabled'.
lsaInstallFailed	long	tmnxOspfVirtNbrLsaInstallFail	The value of tmnxOspfVirtNbrLsaInstallFail indicates the total number of times when an LSA could not be installed into the LSDB due to a resource allocation issue since tmnxOspfAdminState was last set to 'enabled'.
lsaNotInLSDB	long	tmnxOspfVirtNbrLsaNotInLsdbs	The value of tmnxOspfVirtNbrLsaNotInLsdbs indicates the total number of times when an LS request was received for an LSA not installed in the LSDB of this router since tmnxOspfAdminState was last set to 'enabled'.

5620 SAM counter name	Type	MIB counter name	Description
numberOfRestarts	long	tmnxOspfVirtNbrNumRestarts	The value of tmnxOspfVirtNbrNumRestarts indicates the number of times the virtual neighbor has attempted restart since tmnxOspfAdminState was last set to 'enabled'.
optionMismatches	long	tmnxOspfVirtNbrOptionMismatch	The value of tmnxOspfVirtNbrOptionMismatch indicates the total number of times when a LS update was received with an option mismatch since tmnxOspfAdminState was last set to 'enabled'.

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Table I-28 pae802_1x statistics

5620 SAM counter name	Type	MIB counter name	Description
PaePortAuthenticatorDiagStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthDiagTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthAuthEapLogoffWhileAuthenticated	long	dot1xAuthAuthEapLogoffWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to DISCONNECTED, as a result of an EAPOL-Logoff message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.12.
dot1xAuthAuthEapLogoffWhileAuthenticating	long	dot1xAuthAuthEapLogoffWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of an EAPOL-Logoff message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.9.
dot1xAuthAuthEapStartsWhileAuthenticated	long	dot1xAuthAuthEapStartsWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to CONNECTING, as a result of an EAPOL-Start message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.11.
dot1xAuthAuthEapStartsWhileAuthenticating	long	dot1xAuthAuthEapStartsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of an EAPOL-Start message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.8.
dot1xAuthAuthFailWhileAuthenticating	long	dot1xAuthAuthFailWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to HELD, as a result of the Backend Authentication state machine indicating authentication failure (authFail = TRUE). REFERENCE 9.4.2, 8.5.4.2.6.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthAuthReauthsWhileAuthenticated	long	dot1xAuthAuthReauthsWhileAuthenticated	Counts the number of times that the state machine transitions from AUTHENTICATED to CONNECTING, as a result of a reauthentication request (reAuthenticate = TRUE). REFERENCE 9.4.2, 8.5.4.2.10.
dot1xAuthAuthReauthsWhileAuthenticating	long	dot1xAuthAuthReauthsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of a reauthentication request (reAuthenticate = TRUE). REFERENCE 9.4.2, 8.5.4.2.7.
dot1xAuthAuthSuccessWhileAuthenticating	long	dot1xAuthAuthSuccessWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to AUTHENTICATED, as a result of the Backend Authentication state machine indicating successful authentication of the Supplicant (authSuccess = TRUE). REFERENCE 9.4.2, 8.5.4.2.4.
dot1xAuthAuthTimeoutsWhileAuthenticating	long	dot1xAuthAuthTimeoutsWhileAuthenticating	Counts the number of times that the state machine transitions from AUTHENTICATING to ABORTING, as a result of the Backend Authentication state machine indicating authentication timeout (authTimeout = TRUE). REFERENCE 9.4.2, 8.5.4.2.5.
dot1xAuthBackendAccessChallenges	long	dot1xAuthBackendAccessChallenges	Counts the number of times that the state machine receives an initial Access-Challenge packet from the Authentication server (i.e., aReq becomes TRUE, causing exit from the RESPONSE state). Indicates that the Authentication Server has communication with the Authenticator. REFERENCE 9.4.2, 8.5.6.2.2.
dot1xAuthBackendAuthFails	long	dot1xAuthBackendAuthFails	Counts the number of times that the state machine receives an EAP-Failure message from the Authentication Server (i.e., aFail becomes TRUE, causing a transition from RESPONSE to FAIL). Indicates that the Supplicant has not authenticated to the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.6.
dot1xAuthBackendAuthSuccesses	long	dot1xAuthBackendAuthSuccesses	Counts the number of times that the state machine receives an EAP-Success message from the Authentication Server (i.e., aSuccess becomes TRUE, causing a transition from RESPONSE to SUCCESS). Indicates that the Supplicant has successfully authenticated to the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.5.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthBackendNonNakResponsesFromSupplicant	long	dot1xAuthBackendNonNakResponsesFromSupplicant	Counts the number of times that the state machine receives a response from the Supplicant to an initial EAP-Request, and the response is something other than EAP-NAK (i.e., rxResp becomes TRUE, causing the state machine to transition from REQUEST to RESPONSE, and the response is not an EAP-NAK). Indicates that the Supplicant can respond to the Authenticator's chosen EAP-method. REFERENCE 9.4.2, 8.5.6.2.4.
dot1xAuthBackendOtherRequestsToSupplicant	long	dot1xAuthBackendOtherRequestsToSupplicant	Counts the number of times that the state machine sends an EAP-Request packet (other than an Identity, Notification, Failure or Success message) to the Supplicant (i.e., executes txReq on entry to the REQUEST state). Indicates that the Authenticator chose an EAP-method. REFERENCE 9.4.2, 8.5.6.2.3.
dot1xAuthBackendResponses	long	dot1xAuthBackendResponses	Counts the number of times that the state machine sends an initial Access-Request packet to the Authentication server (i.e., executes sendRespToServer on entry to the RESPONSE state). Indicates that the Authenticator attempted communication with the Authentication Server. REFERENCE 9.4.2, 8.5.6.2.1.
dot1xAuthEapLogoffsWhileConnecting	long	dot1xAuthEapLogoffsWhileConnecting	Counts the number of times that the state machine transitions from CONNECTING to DISCONNECTED as a result of receiving an EAPOL-Logoff message. REFERENCE 9.4.2, 8.5.4.2.2.
dot1xAuthEntersAuthenticating	long	dot1xAuthEntersAuthenticating	Counts the number of times that the state machine transitions from CONNECTING to AUTHENTICATING, as a result of an EAP-Response/Identity message being received from the Supplicant. REFERENCE 9.4.2, 8.5.4.2.3.
dot1xAuthEntersConnecting	long	dot1xAuthEntersConnecting	Counts the number of times that the state machine transitions to the CONNECTING state from any other state. REFERENCE 9.4.2, 8.5.4.2.1.
PaePortAuthenticatorSessionStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthSessionStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthSessionAuthenticMethod	int	dot1xAuthSessionAuthenticMethod	The authentication method used to establish the session. REFERENCE 9.4.4, Session Authentication Method.
dot1xAuthSessionFramesRx	long	dot1xAuthSessionFramesRx	The number of user data frames received on this Port during the session. REFERENCE 9.4.4, Session Frames Received.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthSessionFramesTx	long	dot1xAuthSessionFramesTx	The number of user data frames transmitted on this Port during the session. REFERENCE 9.4.4, Session Frames Transmitted.
dot1xAuthSessionOctetsRx	UINT128	dot1xAuthSessionOctetsRx	The number of octets received in user data frames on this Port during the session. REFERENCE 9.4.4, Session Octets Received.
dot1xAuthSessionOctetsTx	UINT128	dot1xAuthSessionOctetsTx	The number of octets transmitted in user data frames on this Port during the session. REFERENCE 9.4.4, Session Octets Transmitted.
dot1xAuthSessionTerminateCause	int	dot1xAuthSessionTerminateCause	The reason for the session termination. REFERENCE 9.4.4, Session Terminate Cause.
dot1xAuthSessionTime	long	dot1xAuthSessionTime	The duration of the session in seconds. REFERENCE 9.4.4, Session Time.
PaePortAuthenticatorStats MIB table name: IEEE8021-PAE-MIB.dot1xAuthStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			
dot1xAuthEapLengthErrorFramesRx	long	dot1xAuthEapLengthErrorFramesRx	The number of EAPOL frames that have been received by this Authenticator in which the Packet Body Length field is invalid. REFERENCE 9.4.2, EAP length error frames received.
dot1xAuthEapolFramesRx	long	dot1xAuthEapolFramesRx	The number of valid EAPOL frames of any type that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL frames received.
dot1xAuthEapolFramesTx	long	dot1xAuthEapolFramesTx	The number of EAPOL frames of any type that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL frames transmitted.
dot1xAuthEapolLogoffFramesRx	long	dot1xAuthEapolLogoffFramesRx	The number of EAPOL Logoff frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Logoff frames received.
dot1xAuthEapolReqFramesTx	long	dot1xAuthEapolReqFramesTx	The number of EAP Request frames (other than Rq/Id frames) that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL Request frames transmitted.
dot1xAuthEapolReqIdFramesTx	long	dot1xAuthEapolReqIdFramesTx	The number of EAP Req/Id frames that have been transmitted by this Authenticator. REFERENCE 9.4.2, EAPOL Req/Id frames transmitted.
dot1xAuthEapolRespFramesRx	long	dot1xAuthEapolRespFramesRx	The number of valid EAP Response frames (other than Resp/Id frames) that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Response frames received.

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5620 SAM counter name	Type	MIB counter name	Description
dot1xAuthEapolRespIdFramesRx	long	dot1xAuthEapolRespIdFramesRx	The number of EAP Resp/Id frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Resp/Id frames received.
dot1xAuthEapolStartFramesRx	long	dot1xAuthEapolStartFramesRx	The number of EAPOL Start frames that have been received by this Authenticator. REFERENCE 9.4.2, EAPOL Start frames received.
dot1xAuthInvalidEapolFramesRx	long	dot1xAuthInvalidEapolFramesRx	The number of EAPOL frames that have been received by this Authenticator in which the frame type is not recognized. REFERENCE 9.4.2, Invalid EAPOL frames received.
dot1xAuthLastEapolFrameVersion	long	dot1xAuthLastEapolFrameVersion	The protocol version number carried in the most recently received EAPOL frame. REFERENCE 9.4.2, Last EAPOL frame version.

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Table I-29 pim statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceAdditionalStats MIB table name: TIMETRA-PIM-NG-MIB.vRtrPimNgIfStatsTable Monitored class: pim.Interface			
bootstrapExpPolicyDrops	long	vRtrPimNgIfBtrExpPolicyDrops	The value of vRtrPimNgIfBtrExpPolicyDrops indicates the number of Bootstrap Messages that were not transmitted on this interface because of Bootstrap export policy. PIM Bootstrap export policies are configured using bootstrap export policy objects in vRtrPimNgGenPolicyTable.
bootstrapImpPolicyDrops	long	vRtrPimNgIfBtrImpPolicyDrops	The value of vRtrPimNgIfBtrImpPolicyDrops indicates the number of Bootstrap Messages received on this interface but were dropped because of Bootstrap import policy. PIM Bootstrap import policies are configured using bootstrap import policy objects in vRtrPimNgGenPolicyTable.
joinPolicyDrops	long	vRtrPimNgIfJoinPolicyDrops	The value of vRtrPimNgIfJoinPolicyDrops indicates the number of times the join policy match resulted in dropping PIM Join-Prune Message or one of the source group contained in the message. PIM Join policies are configured using join policy objects in vRtrPimNgGenPolicyTable.
registerPolicyDrops	long	vRtrPimNgIfRegisterPolicyDrops	The value of vRtrPimNgIfRegisterPolicyDrops indicates the number of times the register policy match resulted in dropping PIM Register Message. PIM Register policies are configured using the register policy objects in vRtrPimNgGenPolicyTable.

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5620 SAM counter name	Type	MIB counter name	Description
rxBSMNoRouterAlertDrops	long	vRtrPimNgIfRxBSMNoRouterAlertDrops	The value of vRtrPimNgIfRxBSMNoRouterAlertDrops indicates the number of BSM messages that were dropped because router alert option was not present.
rxBSMWrongIfDrops	long	vRtrPimNgIfRxBSMWrongIfDrops	The value of vRtrPimNgIfRxBSMWrongIfDrops indicates the number of BSM messages that were dropped either because they were not sent by the correct RPF neighbor or because they arrived on the wrong interface.
rxInvalidJoinPrunes	long	vRtrPimNgIfRxInvalidJoinPrunes	The value of vRtrPimNgIfRxInvalidJoinPrunes indicates the number of invalid PIM Join Prune messages received on this interface. A Join Prune message is invalid when the RP address in the message is not the RP for the group specified in the message. If such a message arrives, a vRtrPimNgInvalidJoinPrune notification is sent.
rxInvalidRegisters	long	vRtrPimNgIfRxInvalidRegisters	The value of vRtrPimNgIfRxInvalidRegisters indicates the number of invalid PIM Register messages received on this interface. A Register message is invalid when the RP address in the message is not the RP for the group specified in the message. If such a message arrives, a vRtrPimNgInvalidRegister notification is sent.
rxJoinPruneErrs	long	vRtrPimNgIfRxJoinPruneErrs	The value of vRtrPimNgIfRxJoinPruneErrs indicates the number of errors while processing Join-Prune messages received on this interface.
rxJoinPrunes	long	vRtrPimNgIfRxJoinPrunes	The value of vRtrPimNgIfRxJoinPrunes indicates the number of PIM Join Prune messages received on this interface.
txJoinPrunes	long	vRtrPimNgIfTxJoinPrunes	The value of vRtrPimNgIfTxJoinPrunes indicates the number of PIM Join Prune messages transmitted on this interface.
InterfaceStats MIB table name: TIMETRA-PIM-NG-MIB.vRtrPimNgIfStatsTable Monitored classes: • pim.Interface • pim.InterfaceExtension			
bsmErrs	long	vRtrPimNgIfTxBsmErrs	The value of vRtrPimNgIfTxBsmErrs indicates the number of errors while transmitting PIM Bootstrap Messages (BSM) on this interface.
bsmPdus	long	vRtrPimNgIfTxBsmPdus	The value of vRtrPimNgIfTxBsmPdus indicates the number of PIM Bootstrap Messages (BSM) transmitted on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
mcacPolicyDrops	long	vRtrPimNgIfMcacPolicyDrops	The value of the object vRtrPimNgIfMcacPolicyDrops indicates the number times a PIM Group is dropped because of applying a multicast CAC policy on this interface.
registerStopErrs	long	vRtrPimNgIfTxRegisterStopErrs	The value of vRtrPimNgIfTxRegisterStopErrs indicates the number of PIM errors while trasmitting PIM Register Stop messages on this interface.
registerStops	long	vRtrPimNgIfTxRegisterStops	The value of vRtrPimNgIfTxRegisterStops indicates the number of PIM Register Stop messages transmitted on this interface.
rxAssertErrs	long	vRtrPimNgIfRxAssertErrs	The value of vRtrPimNgIfRxAssertErrs indicates the number of errors while processing Assert messages received on this interface.
rxAsserts	long	vRtrPimNgIfRxAsserts	The value of vRtrPimNgIfRxAsserts indicates the number of PIM Assert messages received on this interface.
rxBadChecksumDiscards	long	vRtrPimNgIfRxBadChecksumDiscard	The value of vRtrPimNgIfRxBadChecksumDiscard indicates the number of PIM messages received on this interface which were discarded because of bad checksum.
rxBadEncodings	long	vRtrPimNgIfRxBadEncodings	The value of vRtrPimNgIfRxBadEncodings indicates the number of PIM messages with bad encodings received on this interface.
rxBadVersionDiscards	long	vRtrPimNgIfRxBadVersionDiscard	The value of vRtrPimNgIfRxBadVersionDiscard indicates the number of PIM messages with bad versions received on this interface.
rxBsmPduDrops	long	vRtrPimNgIfRxBsmPduDrops	The value of vRtrPimNgIfRxBsmPduDrops indicates the number of Bootstrap Messages received on this interface but were dropped.
rxBsmPdus	long	vRtrPimNgIfRxBsmPdus	The value of vRtrPimNgIfRxBsmPdus indicates the number of Bootstrap Messages received on this interface.
rxCRPAdvNoRouterAlert	long	vRtrPimNgIfRxCRPAdvNoRtrAlert	The value of vRtrPimNgIfRxCRPAdvNoRtrAlert indicates the number of Candidate-RP Advertizements(C-RP-Adv) received on this interface which had no router alert option set.
rxHellos	long	vRtrPimNgIfRxHellos	The value of vRtrPimNgIfRxHellos indicates the number of PIM hello messages received on this interface.
rxHellosDropped	long	vRtrPimNgIfRxHellosDropped	The value of vRtrPimNgIfRxHellosDropped indicates the number of PIM Hello messages which were received on this interface but were dropped.

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5620 SAM counter name	Type	MIB counter name	Description
rxNbrUnknown	long	vRtrPimNgIfRxNbrUnknown	The value of vRtrPimNgIfRxNbrUnknown indicates the number of PIM messages (other than Hello messages) which were received on this interface and were rejected because the adjacency with the neighbor router was not already established.
rxNullRegisters	long	vRtrPimNgIfRxNullRegisters	The value of vRtrPimNgIfRxNullRegisters indicates the number of PIM Null Register messages received on this interface.
rxPkts	long	vRtrPimNgIfRxPkts	The value of vRtrPimNgIfRxPkts indicates the number of multicast data packets received on this interface.
rxRegisterErrs	long	vRtrPimNgIfRxRegisterErrs	The value of vRtrPimNgIfRxRegisterErrs indicates the number of errors while processing Register messages received on this interface.
rxRegisters	long	vRtrPimNgIfRxRegisters	The value of vRtrPimNgIfRxRegisters indicates the number of PIM Register messages received on this interface.
rxRegisterStopErrs	long	vRtrPimNgIfRxRegisterStopErrs	The value of vRtrPimNgIfRxRegisterStopErrs indicates the number of errors while processing Register Stop messages received on this interface.
rxRegisterStops	long	vRtrPimNgIfRxRegisterStops	The value of vRtrPimNgIfRxRegisterStops indicates the number of PIM Register Stop messages received on this interface.
rxUnknownPdus	long	vRtrPimNgIfRxUnknownPdus	The value of vRtrPimNgIfRxUnknownPdus indicates the number of packets received with an unsupported PIM type.
sgTypes	long	vRtrPimNgIfSGTypes	The value of vRtrPimNgIfSGTypes indicates the number of entries in vRtrPimNgIfGrpSrcTable for which vRtrPimNgIfGrpSrcType is 'sg'.
starGTypes	long	vRtrPimNgIfStarGTypes	The value of vRtrPimNgIfStarGTypes indicates the number of entries in vRtrPimNgIfGrpSrcTable for which vRtrPimNgIfGrpSrcType is 'starG'.
starStarRPTypes	long	vRtrPimNgIfStarStarRPTypes	The value of vRtrPimNgIfStarStarRPTypes indicates the number of entries in vRtrPimNgIfGrpSrcTable for which vRtrPimNgIfGrpSrcType is 'starStarRP'.
txAsserts	long	vRtrPimNgIfTxAsserts	The value of vRtrPimNgIfTxAsserts indicates the number of PIM Assert messages transmitted on this interface.
txHellos	long	vRtrPimNgIfTxHellos	The value of vRtrPimNgIfTxHellos indicates the number of PIM Hello messages transmitted on this interface.
txPkts	long	vRtrPimNgIfTxPkts	The value of vRtrPimNgIfTxPkts indicates the number of multicast data packets transmitted on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
PimGenSiteStats MIB table name: TIMETRA-PIM-NG-MIB.vRtrPimNgGenStatTable Monitored classes: • pim.Site • pim.SiteExtension			
forwardCrpaDrops	long	vRtrPimNgGenStatFwdCrpaDrops	The value of vRtrPimNgGenStatFwdCrpaDrops indicates the number of times the Candidate-RP Advertizements(C-RP-Adv) could not be forwarded by the router.
forwardCrpaPdus	long	vRtrPimNgGenStatForwardCrpaPdus	The value of vRtrPimNgGenStatForwardCrpaPdus indicates the number of Candidate-RP Advertizements(C-RP-Adv) that were forwarded by the router. C-RP-Adv's are forwarded when the received advertizement has a router alert set and the destination address is not the router's local address.
rxActiveMdts	long	vRtrPimNgGenStatRxActiveMdts	The value of vRtrPimNgGenStatRxActiveMdts indicates number of active Mdts on which the PE is receiving packets. This object is applicable to VPRNs only.
rxCrpaPduDrops	long	vRtrPimNgGenStatRxCrpaPduDrops	The value of vRtrPimNgGenStatRxCrpaPduDrops indicates the number of PIM Candidate-RP Advertizements (C-RP-Adv) received by this instance, but were dropped.
rxCrpaPdus	long	vRtrPimNgGenStatRxCrpaPdus	The value of vRtrPimNgGenStatRxCrpaPdus indicates the number of PIM Candidate-RP Advertizements (C-RP-Adv) received by this instance.
rxMdtJoinTlvErrs	long	vRtrPimNgGenStatRxMdtJnTlvErrs	The value of vRtrPimNgGenStatRxMdtJnTlvErrs indicates indicates number of times MDT Join TLVs were dropped due to errors in the received TLV.
rxMdtJoinTlvs	long	vRtrPimNgGenStatRxMdtJoinTlvs	The value of vRtrPimNgGenStatRxMdtJoinTlvs indicates the number of times MDT Join TLV were received.
sgTypes	long	vRtrPimNgGenStatSGTypes	The value of vRtrPimNgGenStatSGTypes indicates the number of entries in vRtrPimNgGrpSrcTable for which vRtrPimNgGrpSrcType is 'sg'.
starGTypes	long	vRtrPimNgGenStatStarGTypes	The value of vRtrPimNgGenStatStarGTypes indicates the number of entries in vRtrPimNgGrpSrcTable for which vRtrPimNgGrpSrcType is 'starG'.

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5620 SAM counter name	Type	MIB counter name	Description
starStarRPTypes	long	vRtrPimNgGenStatStarStarRPTypes	The value of vRtrPimNgGenStatStarStarRPTypes indicates the number of entries in vRtrPimNgGrpSrcTable for which vRtrPimNgGrpSrcType is 'starStarRP'.
txActiveMdts	long	vRtrPimNgGenStatTxActiveMdts	The value of vRtrPimNgGenStatTxActiveMdts indicates the number of active MDTs on which the PE is forwarding packets. This object is applicable to VPRNs only.
txCrpaPduErrs	long	vRtrPimNgGenStatTxCrpaPduErrs	The value of vRtrPimNgGenStatTxCrpaPduErrs indicates the number of errors while transmitting PIM Candidate-RP Advertizements (C-RP-Adv).
txCrpaPdus	long	vRtrPimNgGenStatTxCrpaPdus	The value of vRtrPimNgGenStatTxCrpaPdus indicates the number of PIM Candidate-RP Advertisements (C-RP-Adv) transmitted by this router instance.
txMdtJoinTlvErrs	long	vRtrPimNgGenStatTxMdtJnTlvErrs	The value of vRtrPimNgGenStatTxMdtJnTlvErrs indicates indicates the number of times MDT Join TLV could not be transmitted.
txMdtJoinTlvs	long	vRtrPimNgGenStatTxMdtJoinTlvs	The value of vRtrPimNgGenStatTxMdtJoinTlvs indicates the number of times MDT Join TLV were transmitted.
txNullRegisters	long	vRtrPimNgGenStatTxNullRegisters	The value of vRtrPimNgGenStatTxNullRegisters indicates the number of PIM Null Register messages transmitted by this instance.
txRegisterErrs	long	vRtrPimNgGenStatTxRegisterErrs	The value of vRtrPimNgGenStatTxRegisterErrs indicates the number the times there was an error while transmitting PIM Register messages by this instance.
txRegisters	long	vRtrPimNgGenStatTxRegisters	The value of vRtrPimNgGenStatTxRegisters indicates the number of PIM Register messages transmitted by this instance.
txRegisterTTLDrops	long	vRtrPimNgGenStatTxRegTTLDrops	The value of vRtrPimNgGenStatTxRegTTLDrops indicates the number of multicast data packets which could not be encapsulated in Register messages because the Time To Live (TTL) was zero.
PimGroupStats MIB table name: TIMETRA-PIM-NG-MIB.vRtrPimNgGrpSrcStatTable Monitored class: pim.Groups			

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5620 SAM counter name	Type	MIB counter name	Description
discardedPkts	UINT128	vRtrPimNgGrpSrcStatDscrdPkts	The value of vRtrPimNgGrpSrcStatDscrdPkts indicates the number of multicast packets that matched this source group entry but were discarded. For (S,G) entries, if the traffic is getting forwarded on the SPT, the packets arriving from the RPT will be discarded.
forwardedOctets	UINT128	vRtrPimNgGrpSrcStatFrdedOct	The value of vRtrPimNgGrpSrcStatFrdedOct indicates the number of multicast octets that were forwarded to the interfaces in the outgoing interface list. vRtrPimNgGrpSrcIfTable lists all the interfaces in the outgoing interface list.
forwardedPkts	UINT128	vRtrPimNgGrpSrcStatFrwdedPkts	The value of vRtrPimNgGrpSrcStatFrwdedPkts indicates the number of multicast packets that were forwarded to the interfaces in the outgoing interface list. vRtrPimNgGrpSrcIfTable lists all the interfaces in the outgoing interface list.
rpfMismatches	UINT128	vRtrPimNgGrpSrcStatRPFMsmtch	The value of vRtrPimNgGrpSrcStatRPFMsmtch indicates the number of multicast packets that matched this source group entry but they did not arrive on the the interface indicated by vRtrPimNgGrpSrcRpfIfIndex.

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Table I-30 ppp statistics

5620 SAM counter name	Type	MIB counter name	Description
PppStats MIB table name: TIMETRA-PPP-MIB.tmnxPppTable Monitored class: ppp.Interface			
keepaliveEchoReplyPacketsReceived	long	tmnxPppKaInPktCount	The number of echo-reply packets received.
keepaliveEchoRequestPacketsSent	long	tmnxPppKaOutPktCount	The number of echo-request packets sent.
keepaliveThresholdExceedsCount	long	tmnxPppKaThresholdExceedsCount	The number of times that tmnxPppKaDropCount was reached.
lqmInRate	long	tmnxPppLqmInRate	The average of 'SaveInPackets'/'PeerOutPackets' in the last five consecutive LQRs received.
lqmLqrPacketsReceived	long	tmnxPppLqmInPktCount	The number of LQR packets received.
lqmLqrPacketsSent	long	tmnxPppLqmOutPktCount	The number of LQR packets sent.
lqmOutRate	long	tmnxPppLqmOutRate	The average of 'PeerInPackets'/'LastOutPackets' in the last five consecutive LQRs received.

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5620 SAM counter name	Type	MIB counter name	Description
lqmThresholdExceedsCount	long	tmnxPppLqmThresholdExceedsCount	The number of times that either tmnxPppLqmInRate or tmnxPppLqmOutRate falls below the specified quality percentage when PPP quality or LQM is enforced.

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Table I-31 radiusaccounting statistics

5620 SAM counter name	Type	MIB counter name	Description
PolicyStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAcctPlcyStatsTable Monitored class: radiusaccounting.Policy			
receiveResponses	long	tmnxSubAcctPlcyRxResponses	The value of tmnxSubAcctPlcyRxResponses indicates the number of accounting responses received for this policy.
requestRetries	long	tmnxSubAcctPlcySendRetries	The value of tmnxSubAcctPlcySendRetries indicates the number of retries to a different server for a single accounting request for this policy.
requestsFail	long	tmnxSubAcctPlcySendFail	The value of tmnxSubAcctPlcySendFail indicates how many accounting requests failed because the packet could not be sent out.
requestTimeOut	long	tmnxSubAcctPlcyReqTimeouts	The value of tmnxSubAcctPlcyReqTimeouts indicates the number of accounting requests which have timed out for this policy.
transferRequests	long	tmnxSubAcctPlcyTxRequests	The value of tmnxSubAcctPlcyTxRequests indicates the number of accounting requests transmitted for this policy.
RadiusEntryStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAcctPlcyRadStatsTable Monitored class: radiusaccounting.RadiusEntry			
receiveResponses	long	tmnxSubAcctPlcyRadRxResponses	The value of tmnxSubAcctPlcyRadRxResponses indicates the number of accounting responses received for this server.
requestsFail	long	tmnxSubAcctPlcyRadReqSendFail	The value of tmnxSubAcctPlcyRadReqSendFail indicates the number of accounting requests failed because the packet could not be sent out.
requestTimeOut	long	tmnxSubAcctPlcyRadReqTimeouts	The value of tmnxSubAcctPlcyRadReqTimeouts indicates the number of accounting requests which have timed out for this server.

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5620 SAM counter name	Type	MIB counter name	Description
transferRequests	long	tmnxSubAcctPlcyRadTxRequests	The value of tmnxSubAcctPlcyRadTxRequests indicates the number of accounting requests transmitted for this server.

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Table I-32 ressubscr statistics

5620 SAM counter name	Type	MIB counter name	Description
BsxSubCustRecAppGrpStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubTable Monitored class: ressubscr.ResidentialSubscriberInstance			
appGrpName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxSubCustRecAppStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubTable Monitored class: ressubscr.ResidentialSubscriberInstance			
appName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxSubCustRecProtStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubTable Monitored class: ressubscr.ResidentialSubscriberInstance			
protName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxSubStudyAppStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubSdyTable Monitored class: ressubscr.ResidentialSubscriberInstance			
appName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
BsxSubStudyProtStats MIB table name: TIMETRA-BSX-NG-MIB.tmnxBsxStatAaSubSdyTable Monitored class: ressubscr.ResidentialSubscriberInstance			

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5620 SAM counter name	Type	MIB counter name	Description
protName	String	tmnxBsxStatAaName	The value of tmnxBsxStatAaName specifies either the ISA-AA protocol, application or app-group name for which statistics are requested. The tmnxBsxStatAaType is used to determine the statistics type.
HostTrackStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubHostTrkStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
sapInnerEncapValue	long	sapEncapValue	—
sapPortId	String	sapPortId	—
serviceId	long	svcId	—
statsType	int	tmnxSubHostTrkStatsType	The value of tmnxSubHostTrkStatsType indicates the type of host tracking statistics contained in tmnxSubHostTrkStatsVal.
statsValue	long	tmnxSubHostTrkStatsVal	The value of tmnxSubHostTrkStatsType indicates the value of the host tracking statistics of the type indicated by tmnxSubHostTrkStatsType, for this subscriber host.
subscriberHostAddress	String	tmnxSubHostInfoV2IpAddress	The value of tmnxSubHostInfoV2IpAddress specifies the IP address of this subscriber host.
subscriberHostAddressType	int	tmnxSubHostInfoV2IpAddressType	The value of tmnxSubHostInfoV2IpAddressType specifies the type of address stored in tmnxSubHostInfoV2IpAddress.
subscrIdent	String	tmnxSubInfoSubIdent	The value of tmnxSubInfoSubIdent specifies the subscriber identification of this subscriber.
HostTrackStatsOnSap MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubHostSapTrkStatsTable Monitored classes: • vpls.L2AccessInterface • vprn.ServiceAccessPoint • ies.ServiceAccessPoint			
statsType	int	tmnxSubHostSapTrkStatsType	The value of tmnxSubHostSapTrkStatsType indicates the type of host tracking statistics contained in tmnxSubHostSapTrkStatsVal.
statsValue	long	tmnxSubHostSapTrkStatsVal	The value of tmnxSubHostSapTrkStatsType indicates the value of the host tracking statistics of the type indicated by tmnxSubHostSapTrkStatsType, for this host.
subscriberHostAddress	String	tmnxSubHostSapTrkHostAddr	The value of tmnxSubHostSapTrkHostAddr indicates the address of the host.

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5620 SAM counter name	Type	MIB counter name	Description
subscriberHostAddressType	int	tmnxSubHostSapTrkHostAddrType	The value of tmnxSubHostSapTrkHostAddrType indicates the address type of tmnxSubHostSapTrkHostAddr.
SLAProfInstEgrQStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSLAProfInstEgrQStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
egrQStatsDropInProfileOctets	UINT128	tmnxSPIEgrQStatsDropInProfOctets	The value of tmnxSPIEgrQStatsDropInProfOctets indicates the number of in-profile octets discarded by the egress Qchip.
egrQStatsDropInProfilePackets	UINT128	tmnxSPIEgrQStatsDropInProfPkts	The value of tmnxSPIEgrQStatsDropInProfPkts indicates the number of in-profile packets discarded by the egress Qchip.
egrQStatsDropOutProfileOctets	UINT128	tmnxSPIEgrQStatsDropOutProfOctets	The value of tmnxSPIEgrQStatsDropOutProfOctets indicates the number of out-of-profile octets discarded by the egress Qchip.
egrQStatsDropOutProfilePackets	UINT128	tmnxSPIEgrQStatsDropOutProfPkts	The value of tmnxSPIEgrQStatsDropOutProfPkts indicates the number of out-of-profile packets discarded by the egress Qchip.
egrQStatsFwdInProfileOctets	UINT128	tmnxSPIEgrQStatsFwdInProfOctets	The value of tmnxSPIEgrQStatsFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
egrQStatsFwdInProfilePackets	UINT128	tmnxSPIEgrQStatsFwdInProfPkts	The value of tmnxSPIEgrQStatsFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
egrQStatsFwdOutProfileOctets	UINT128	tmnxSPIEgrQStatsFwdOutProfOctets	The value of tmnxSPIEgrQStatsFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
egrQStatsFwdOutProfilePackets	UINT128	tmnxSPIEgrQStatsFwdOutProfPkts	The value of tmnxSPIEgrQStatsFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
egrQStatsQueueId	long	tmnxSPIEgrQStatsQueueId	The value of tmnxSPIEgrQStatsQueueId specifies the index of the egress QoS queue of this SLA profile instance.
slaProfileName	String	tmnxSLAProfName	The value of tmnxSLAProfName specifies the name of the SLA profile.
SLAProfInstIngQStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSLAProfInstIngQStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			

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5620 SAM counter name	Type	MIB counter name	Description
ingQStatsDropHiPriorityOctets	UINT128	tmnxSPIIngQStatsDropHiPrioOctets	The value of tmnxSPIIngQStatsDropHiPrioOctets indicates the number of high priority octets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQStatsDropHiPriorityPackets	UINT128	tmnxSPIIngQStatsDropHiPrioPkts	The value of tmnxSPIIngQStatsDropHiPrioPkts indicates the number of high priority packets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQStatsDropLoPriorityOctets	UINT128	tmnxSPIIngQStatsDropLoPrioOctets	The value of tmnxSPIIngQStatsDropLoPrioOctets indicates the number of low priority octets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQStatsDropLoPriorityPackets	UINT128	tmnxSPIIngQStatsDropLoPrioPkts	The value of tmnxSPIIngQStatsDropLoPrioPkts indicates the number of low priority packets, as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQStatsFwdInProfileOctets	UINT128	tmnxSPIIngQStatsFwdInProfOctets	The value of tmnxSPIIngQStatsFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
ingQStatsFwdInProfilePackets	UINT128	tmnxSPIIngQStatsFwdInProfPkts	The value of tmnxSPIIngQStatsFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
ingQStatsFwdOutProfileOctets	UINT128	tmnxSPIIngQStatsFwdOutProfOctets	The value of tmnxSPIIngQStatsFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
ingQStatsFwdOutProfilePackets	UINT128	tmnxSPIIngQStatsFwdOutProfPkts	The value of tmnxSPIIngQStatsFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
ingQStatsOffHiPriorityOctets	UINT128	tmnxSPIIngQStatsOffHiPrioOctets	The value of tmnxSPIIngQStatsOffHiPrioOctets indicates the number of high priority octets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQStatsOffHiPriorityPackets	UINT128	tmnxSPIIngQStatsOffHiPrioPkts	The value of tmnxSPIIngQStatsOffHiPrioPkts indicates the number of high priority packets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQStatsOffLoPriorityOctets	UINT128	tmnxSPIIngQStatsOffLoPrioOctets	The value of tmnxSPIIngQStatsOffLoPrioOctets indicates the number of low priority octets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
ingQStatsOffLoPriorityPackets	UINT128	tmnxSPIIngQStatsOffLoPrioPkts	The value of tmnxSPIIngQStatsOffLoPrioPkts indicates the number of low priority packets, as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQStatsOffUncoloredOctets	UINT128	tmnxSPIIngQStatsOffUncolOctets	The value of tmnxSPIIngQStatsOffUncolOctets indicates the number of uncolored octets offered to the ingress Qchip.
ingQStatsOffUncoloredPackets	UINT128	tmnxSPIIngQStatsOffUncolPkts	The value of tmnxSPIIngQStatsOffUncolPkts indicates the number of uncolored packets offered to the ingress Qchip.
ingQStatsQueueId	long	tmnxSPIIngQStatsQueueId	The value of tmnxSPIIngQStatsQueueId specifies the index of the ingress QoS queue of this SLA profile instance.
slaProfileName	String	tmnxSLAProfName	The value of tmnxSLAProfName specifies the name of the SLA profile.
SLAProfInstStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSLAProfInstStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
egrQchipDropInProfileOctets	UINT128	tmnxSPIStatsEgrQchipDropInProfOctets	The value of tmnxSPIStatsEgrQchipDropInProfOctets indicates the number of in-profile octets dropped by the egress Qchip.
egrQchipDropInProfilePackets	UINT128	tmnxSPIStatsEgrQchipDropInProfPkts	The value of tmnxSPIStatsEgrQchipDropInProfPkts indicates the number of in-profile packets dropped by the egress Qchip.
egrQchipDropOutProfileOctets	UINT128	tmnxSPIStatsEgrQchipDropOutProfOctets	The value of tmnxSPIStatsEgrQchipDropOutProfOctets indicates the number of out-of-profile octets dropped by the egress Qchip.
egrQchipDropOutProfilePackets	UINT128	tmnxSPIStatsEgrQchipDropOutProfPkts	The value of tmnxSPIStatsEgrQchipDropOutProfPkts indicates the number of out-of-profile packets dropped by the egress Qchip.
egrQchipFwdInProfileOctets	UINT128	tmnxSPIStatsEgrQchipFwdInProfOctets	The value of tmnxSPIStatsEgrQchipFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
egrQchipFwdInProfilePackets	UINT128	tmnxSPIStatsEgrQchipFwdInProfPkts	The value of tmnxSPIStatsEgrQchipFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
egrQchipFwdOutProfileOctets	UINT128	tmnxSPIStatsEgrQchipFwdOutProfOctets	The value of tmnxSPIStatsEgrQchipFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
egrQchipFwdOutProfilePackets	UINT128	tmnxSPIStatsEgrQchipFwdOutProfPkts	The value of tmnxSPIStatsEgrQchipFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
ingPchipOffHiPriorityOctets	UINT128	tmnxSPIStatsIngPchipOffHiPrioOctets	The value of tmnxSPIStatsIngPchipOffHiPrioOctets indicates the number of high priority octets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffHiPriorityPackets	UINT128	tmnxSPIStatsIngPchipOffHiPrioPkts	The value of tmnxSPIStatsIngPchipOffHiPrioPkts indicates the number of high priority packets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffLoPriorityOctets	UINT128	tmnxSPIStatsIngPchipOffLoPrioOctets	The value of tmnxSPIStatsIngPchipOffLoPrioOctets indicates the number of low priority octets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffLoPriorityPackets	UINT128	tmnxSPIStatsIngPchipOffLoPrioPkts	The value of tmnxSPIStatsIngPchipOffLoPrioPkts indicates the number of low priority packets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffUncoloredOctets	UINT128	tmnxSPIStatsIngPchipOffUncolOctets	The value of tmnxSPIStatsIngPchipOffUncolOctets indicates the number of uncolored octets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingPchipOffUncoloredPackets	UINT128	tmnxSPIStatsIngPchipOffUncolPkts	The value of tmnxSPIStatsIngPchipOffUncolPkts indicates the number of uncolored packets as determined by the SLA profile ingress QoS policy, offered by the Pchip to the Qchip.
ingQchipDropHiPriorityOctets	UINT128	tmnxSPIStatsIngQchipDropHiPrioOctets	The value of tmnxSPIStatsIngQchipDropHiPrioOctets indicates the number of high priority octets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQchipDropHiPriorityPackets	UINT128	tmnxSPIStatsIngQchipDropHiPrioPkts	The value of tmnxSPIStatsIngQchipDropHiPrioPkts indicates the number of high priority packets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQchipDropLoPriorityOctets	UINT128	tmnxSPIStatsIngQchipDropLoPrioOctets	The value of tmnxSPIStatsIngQchipDropLoPrioOctets indicates the number of low priority octets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
ingQchipDropLoPriorityPackets	UINT128	tmnxSPIStatsIngQchipDropLoPrioPkts	The value of tmnxSPIStatsIngQchipDropLoPrioPkts indicates the number of low priority packets as determined by the SLA profile ingress QoS policy, dropped by the Qchip.
ingQchipFwdInProfileOctets	UINT128	tmnxSPIStatsIngQchipFwdInProfOctets	The value of tmnxSPIStatsIngQchipFwdInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
ingQchipFwdInProfilePackets	UINT128	tmnxSPIStatsIngQchipFwdInProfPkts	The value of tmnxSPIStatsIngQchipFwdInProfPkts indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
ingQchipFwdOutProfileOctets	UINT128	tmnxSPIStatsIngQchipFwdOutProfOctets	The value of tmnxSPIStatsIngQchipFwdOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
ingQchipFwdOutProfilePackets	UINT128	tmnxSPIStatsIngQchipFwdOutProfPkts	The value of tmnxSPIStatsIngQchipFwdOutProfPkts indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
slaProfileName	String	tmnxSLAProfName	The value of tmnxSLAProfName specifies the name of the SLA profile.
SubEgrQosSchedStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubEgrQosSchedStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
egrQosSchedName	String	tmnxSubEgrQosSchedStatsName	The value of tmnxSubEgrQosSchedStatsName specifies the egress QoS scheduler of this subscriber.
forwardedOctets	UINT128	tmnxSubEgrQosSchedStatsFwdOctets	The value of tmnxSubEgrQosSchedStatsFwdOctets indicates the number of forwarded octets by the egress Qchip, as determined by the subscriber egress scheduler policy.
forwardedPackets	UINT128	tmnxSubEgrQosSchedStatsFwdPkts	The value of tmnxSubEgrQosSchedStatsFwdPkts indicates the number of forwarded packets by the egress Qchip, as determined by the subscriber egress scheduler policy.
SubIngQosSchedStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubIngQosSchedStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
forwardedOctets	UINT128	tmnxSubIngQosSchedStatsFwdOctets	The value of tmnxSubIngQosSchedStatsFwdOctets indicates the number of forwarded octets, as determined by the subscriber ingress scheduler policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
forwardedPackets	UINT128	tmnxSubIngQosSchedStatsFwdPkts	The value of tmnxSubIngQosSchedStatsFwdPkts indicates the number of forwarded packets, as determined by the subscriber ingress scheduler policy, offered by the Pchip to the Qchip.
ingQosSchedName	String	tmnxSubIngQosSchedStatsName	The value of tmnxSubIngQosSchedStatsName specifies the ingress QoS scheduler of this subscriber.
SubscriberEgrOverrideCounterStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubEgrOverrideCounterTable Monitored class: ressubscr.ResidentialSubscriberInstance			
subEgrOvrCounterDropInProfileOctets	UINT128	tmnxSubEgrOvrCntrDropInProfOcts	The value of tmnxSubEgrOvrCntrDropInProfOcts indicates the number of high-priority octets dropped for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterDropInProfilePackets	UINT128	tmnxSubEgrOvrCntrDropInProfPkts	The value of tmnxSubEgrOvrCntrDropInProfPkts indicates the number of high-priority packets dropped for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterDropOutProfilePackets	UINT128	tmnxSubEgrOvrCntrDropOutProfPkts	The value of tmnxSubEgrOvrCntrDropOutProfPkts indicates the number of low-priority packets dropped for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterFwdInProfileOctets	UINT128	tmnxSubEgrOvrCntrFwdInProfOcts	The value of tmnxSubEgrOvrCntrFwdInProfOcts indicates the number of in-profile octets forwarded for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterFwdInProfilePackets	UINT128	tmnxSubEgrOvrCntrFwdInProfPkts	The value of tmnxSubEgrOvrCntrFwdInProfPkts indicates the number of in-profile packets forwarded for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterFwdOutProfileOctets	UINT128	tmnxSubEgrOvrCntrFwdOutProfOcts	The value of tmnxSubEgrOvrCntrFwdOutProfOcts indicates the number of out-of-profile octets forwarded for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.
subEgrOvrCounterFwdOutProfilePackets	UINT128	tmnxSubEgrOvrCntrFwdOutProfPkts	The value of tmnxSubEgrOvrCntrFwdOutProfPkts indicates the number of out-of-profile packets forwarded for the egress counter, specified by the index tmnxSubEgrOvrCntrId, on this subscriber.

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5620 SAM counter name	Type	MIB counter name	Description
subEgrOvrCounterId	long	tmnxSubEgrOvrCntrId	The value of tmnxSubEgrOvrCntrId indicates the counter ID for the statistics.
subEgrOvrCounterSubPortId	long	tmnxSubEgrOvrCntrSubPortId	The value of tmnxSubEgrOvrCntrSubPortId indicates the access port for this entry.
SubscriberEgrQStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubscriberEgrQStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
subEgrQStatsDropInProfileOctets	UINT128	tmnxSubEgrQStatsDropInProfOcts	The value of tmnxSubEgrQStatsDropInProfOcts indicates the number of high-priority octets dropped on egress on this subscriber.
subEgrQStatsDropInProfilePackets	UINT128	tmnxSubEgrQStatsDropInProfPkts	The value of tmnxSubEgrQStatsDropInProfPkts indicates the number of high-priority packets dropped on egress on this subscriber.
subEgrQStatsDropOutProfileOctets	UINT128	tmnxSubEgrQStatsDropOutProfOcts	The value of tmnxSubEgrQStatsDropOutProfOcts indicates the number of low-priority octets dropped on egress on this subscriber.
subEgrQStatsDropOutProfilePackets	UINT128	tmnxSubEgrQStatsDropOutProfPkts	The value of tmnxSubEgrQStatsDropOutProfPkts indicates the number of low-priority packets dropped on egress on this subscriber.
subEgrQStatsFwdInProfileOctets	UINT128	tmnxSubEgrQStatsFwdInProfOcts	The value of tmnxSubEgrQStatsFwdInProfOcts indicates the number of out-of-profile octets forwarded on egress on this subscriber.
subEgrQStatsFwdInProfilePackets	UINT128	tmnxSubEgrQStatsFwdInProfPkts	The value of tmnxSubEgrQStatsFwdInProfPkts indicates the number of in-profile packets forwarded on egress on this subscriber.
subEgrQStatsFwdOutProfileOctets	UINT128	tmnxSubEgrQStatsFwdOutProfOcts	The value of tmnxSubEgrQStatsFwdOutProfOcts indicates the number of out-of-profile octets forwarded on egress on this subscriber.
subEgrQStatsFwdOutProfilePackets	UINT128	tmnxSubEgrQStatsFwdOutProfPkts	The value of tmnxSubEgrQStatsFwdOutProfPkts indicates the number of out-of-profile packets forwarded on egress on this subscriber.
subEgrQStatsHsmdaQueueId	long	tmnxSubEgrQStatsQueueId	The value of tmnxSubEgrQStatsQueueId index specifies the Hsmda egress queue for this entry.
subEgrQStatsSubPortId	long	tmnxSubEgrQStatsSubPortId	The value of tmnxSubEgrQStatsSubPortId indicates the access port for this entry.

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5620 SAM counter name	Type	MIB counter name	Description
SubscriberHsmdaStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubscriberHsmdaStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
hsmdaStatsSubPortId	long	tmnxSubHsmdaStSubPortId	The value of tmnxSubHsmdaStSubPortId indicates the access port for this entry.
subEgrDropInProfileOctets	UINT128	tmnxSubHsmdaStEgrDropInProfOct	The value of tmnxSubHsmdaStEgrDropInProfOct indicates the number of high-priority octets discarded by the egress Qchip for this subscriber.
subEgrDropInProfilePackets	UINT128	tmnxSubHsmdaStEgrDropInProfPkt	The value of tmnxSubHsmdaStEgrDropInProfPkt indicates the number of high-priority packets discarded by the egress Qchip for this subscriber.
subEgrDropOutProfileOctets	UINT128	tmnxSubHsmdaStEgrDropOutProfOct	The value of tmnxSubHsmdaStEgrDropOutProfOct indicates the number of low-priority octets discarded by the egress Qchip for this subscriber.
subEgrDropOutProfilePackets	UINT128	tmnxSubHsmdaStEgrDropOutProfPkt	The value of tmnxSubHsmdaStEgrDropOutProfPkt indicates the number of low-priority packets discarded by the egress Qchip for this subscriber.
subEgrFwdInProfilePackets	UINT128	tmnxSubHsmdaStEgrFwdInProfPkt	The value of tmnxSubHsmdaStEgrFwdInProfPkt indicates the number of in-profile packets forwarded by the egress Qchip for this subscriber.
subEgrFwdOutProfileOctets	UINT128	tmnxSubHsmdaStEgrFwdOutProfOct	The value of tmnxSubHsmdaStEgrFwdOutProfOct indicates the number of out-of-profile octets forwarded by the egress Qchip for this subscriber.
subEgrFwdOutProfilePackets	UINT128	tmnxSubHsmdaStEgrFwdOutProfPkt	The value of tmnxSubHsmdaStEgrFwdOutProfPkt indicates the number of out-of-profile packets forwarded by the egress Qchip for this subscriber.
subIngDropHiPriorityOctets	UINT128	tmnxSubHsmdaStIngDropHiPrioOct	The value of tmnxSubHsmdaStIngDropHiPrioOct indicates the number of high-priority octets discarded by the ingress Qchip for this subscriber.
subIngDropHiPriorityPackets	UINT128	tmnxSubHsmdaStIngDropHiPrioPkt	The value of tmnxSubHsmdaStIngDropHiPrioPkt indicates the number of high-priority packets discarded by the ingress Qchip for this subscriber.
subIngDropLoPriorityOctets	UINT128	tmnxSubHsmdaStIngDropLoPrioOct	The value of tmnxSubHsmdaStIngDropLoPrioOct indicates the number of low-priority octets discarded by the ingress Qchip for this subscriber.

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5620 SAM counter name	Type	MIB counter name	Description
subIngDropLoPriorityPackets	UINT128	tmnxSubHsmdaStIngDropLoPrioPkt	The value of tmnxSubHsmdaStIngDropLoPrioPkt indicates the number of low-priority packets discarded by the ingress Qchip for this subscriber.
subIngFwdInProfileOctets	UINT128	tmnxSubHsmdaStIngFwdInProfOct	The value of tmnxSubHsmdaStIngFwdInProfOct indicates the number of out-of-profile octets forwarded by the ingress Qchip for this subscriber.
subIngFwdInProfilePackets	UINT128	tmnxSubHsmdaStIngFwdInProfPkt	The value of tmnxSubHsmdaStIngFwdInProfPkt indicates the number of in-profile packets forwarded by the ingress Qchip for this subscriber.
subIngFwdOutProfileOctets	UINT128	tmnxSubHsmdaStIngFwdOutProfOct	The value of tmnxSubHsmdaStIngFwdOutProfOct indicates the number of out-of-profile octets forwarded by the ingress Qchip for this subscriber.
subIngFwdOutProfilePackets	UINT128	tmnxSubHsmdaStIngFwdOutProfPkt	The value of tmnxSubHsmdaStIngFwdOutProfPkt indicates the number of out-of-profile packets forwarded by the ingress Qchip for this subscriber.
subIngOffTotalOctets	UINT128	tmnxSubHsmdaStIngOffTotalOct	The value of tmnxSubHsmdaStIngOffTotalOct indicates the total number of octets offered on ingress for this subscriber.
subIngOffTotalPackets	UINT128	tmnxSubHsmdaStIngOffTotalPkt	The value of tmnxSubHsmdaStIngOffTotalPkt indicates the total number of packets offered on ingress for this subscriber.
SubscriberIngOverrideCounterStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubIngOverrideCounterTable Monitored class: ressubscr.ResidentialSubscriberInstance			
subIngOvrCounterDropHiPriorityOctets	UINT128	tmnxSubIngOvrCntrDropHiPrioOcts	The value of tmnxSubIngOvrCntrDropHiPrioOcts indicates the number of high-priority octets dropped for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterDropHiPriorityPackets	UINT128	tmnxSubIngOvrCntrDropHiPrioPkts	The value of tmnxSubIngOvrCntrDropHiPrioPkts indicates the number of high-priority packets dropped for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterDropLoPriorityOctets	UINT128	tmnxSubIngOvrCntrDropLoPrioOcts	The value of tmnxSubIngOvrCntrDropLoPrioOcts indicates the number of low-priority octets dropped for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.

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5620 SAM counter name	Type	MIB counter name	Description
subIngOvrCounterDropLoPriorityPackets	UINT128	tmnxSubIngOvrCntrDropLoPrioPkts	The value of tmnxSubIngOvrCntrDropLoPrioPkts indicates the number of low-priority packets dropped for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterFwdInProfileOctets	UINT128	tmnxSubIngOvrCntrFwdInProfOcts	The value of tmnxSubIngOvrCntrFwdInProfOcts indicates the number of in-profile octets forwarded for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterFwdInProfilePackets	UINT128	tmnxSubIngOvrCntrFwdInProfPkts	The value of tmnxSubIngOvrCntrFwdInProfPkts indicates the number of in-profile packets forwarded for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterFwdOutProfileOctets	UINT128	tmnxSubIngOvrCntrFwdOutProfOcts	The value of tmnxSubIngOvrCntrFwdOutProfOcts indicates the number of out-of-profile octets forwarded for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterFwdOutProfilePackets	UINT128	tmnxSubIngOvrCntrFwdOutProfPkts	The value of tmnxSubIngOvrCntrFwdOutProfPkts indicates the number of out-of-profile packets forwarded for the ingress counter, specified by the index tmnxSubIngOvrCntrId, on this subscriber.
subIngOvrCounterId	long	tmnxSubIngOvrCntrId	The value of tmnxSubIngOvrCntrId indicates the counter ID for the statistics.
subIngOvrCounterOffTotalOctets	UINT128	tmnxSubIngOvrCntrOffTotalOcts	The value of tmnxSubIngOvrCntrOffTotalOcts indicates the total number of octets offered on ingress on this subscriber.
subIngOvrCounterOffTotalPackets	UINT128	tmnxSubIngOvrCntrOffTotalPkts	The value of tmnxSubIngOvrCntrOffTotalPkts indicates the total number of packets offered on ingress on this subscriber.
subIngOvrCounterSubPortId	long	tmnxSubIngOvrCntrSubPortId	The value of tmnxSubIngOvrCntrSubPortId indicates the access port for this entry.
SubscriberIngQStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubscriberIngQStatsTable Monitored class: ressubscr.ResidentialSubscriberInstance			
subIngQStatsDropHiPriorityOctets	UINT128	tmnxSubIngQStatsDropHiPrioOcts	The value of tmnxSubIngQStatsDropHiPrioOcts indicates the number of high-priority octets dropped on ingress on this subscriber.
subIngQStatsDropHiPriorityPackets	UINT128	tmnxSubIngQStatsDropHiPrioPkts	The value of tmnxSubIngQStatsDropHiPrioPkts indicates the number of high-priority packets dropped on ingress on this subscriber.

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5620 SAM counter name	Type	MIB counter name	Description
subIngQStatsDropLoPriorityOctets	UINT128	tmnxSubIngQStatsDropLoPrioOcts	The value of tmnxSubIngQStatsDropLoPrioOcts indicates the number of low-priority octets dropped on ingress on this subscriber.
subIngQStatsDropLoPriorityPackets	UINT128	tmnxSubIngQStatsDropLoPrioPkts	The value of tmnxSubIngQStatsDropLoPrioPkts indicates the number of low-priority packets dropped on ingress on this subscriber.
subIngQStatsFwdInProfileOctets	UINT128	tmnxSubIngQStatsFwdInProfOcts	The value of tmnxSubIngQStatsFwdInProfOcts indicates the number of out-of-profile octets forwarded on ingress on this subscriber.
subIngQStatsFwdInProfilePackets	UINT128	tmnxSubIngQStatsFwdInProfPkts	The value of tmnxSubIngQStatsFwdInProfPkts indicates the number of in-profile packets forwarded on ingress on this subscriber.
subIngQStatsFwdOutProfileOctets	UINT128	tmnxSubIngQStatsFwdOutProfOcts	The value of tmnxSubIngQStatsFwdOutProfOcts indicates the number of out-of-profile octets forwarded on ingress on this subscriber.
subIngQStatsFwdOutProfilePackets	UINT128	tmnxSubIngQStatsFwdOutProfPkts	The value of tmnxSubIngQStatsFwdOutProfPkts indicates the number of out-of-profile packets forwarded on ingress on this subscriber.
subIngQStatsHsmdaQueueId	long	tmnxSubIngQStatsQueueId	The value of tmnxSubIngQStatsQueueId index specifies the Hsmda ingress queue for this entry.
subIngQStatsOffTotalOctets	UINT128	tmnxSubIngQStatsOffTotalOcts	The value of tmnxSubIngQStatsOffTotalOcts indicates the total number of octets offered on ingress on this subscriber.
subIngQStatsOffTotalPackets	UINT128	tmnxSubIngQStatsOffTotalPkts	The value of tmnxSubIngQStatsOffTotalPkts indicates the total number of packets offered for this subscriber.
subIngQStatsSubPortId	long	tmnxSubIngQStatsSubPortId	The value of tmnxSubIngQStatsSubPortId indicates the access port for this entry.

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Table I-33 rip statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceReceiveStats MIB table name: TIMETRA-RIP-MIB.vRtrRipIfStatTable Monitored class: rip.Interface			

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5620 SAM counter name	Type	MIB counter name	Description
badPackets	long	vRtrRipIfStatAllRcvBadPackets	vRtrRipIfStatAllRcvBadPackets is the number of RIP updates received on this interface that were discarded as invalid.
v1BadRoutes	long	vRtrRipIfStatV1BadRoutes	vRtrRipIfStatV1BadRoutes is the number of routes, in valid RIPv1 packets, which were ignored for any reason (e.g. unknown address family, or invalid metric).
v1Requests	long	vRtrRipIfStatV1RcvRequests	vRtrRipIfStatV1RcvRequests is the number of RIPv1 request packets received by the RIP process.
v1RequestsIgnored	long	vRtrRipIfStatV1BadRequests	vRtrRipIfStatV1BadRequests is the number of RIPv1 request packets received by the RIP process that were subsequently discarded for any reason.
v1Updates	long	vRtrRipIfStatV1RcvUpdates	vRtrRipIfStatV1RcvUpdates is the number of RIPv1 response packets received by the RIP process.
v1UpdatesIgnored	long	vRtrRipIfStatV1BadUpdates	vRtrRipIfStatV1BadUpdates is the number of RIPv1 response packets received by the RIP process which were subsequently discarded for any reason.
v2AuthenticationErrors	long	vRtrRipIfStatAuthErrors	vRtrRipIfStatAuthErrors is the number of RIPv2 packets received by the RIP process which were subsequently discarded because of an error authenticating the packet.
v2BadRoutes	long	vRtrRipIfStatV2BadRoutes	vRtrRipIfStatV2BadRoutes is the number of routes, in valid RIPv2 packets, which were ignored for any reason (e.g. unknown address family, or invalid metric).
v2Requests	long	vRtrRipIfStatV2RcvRequests	vRtrRipIfStatV2RcvRequests is the number of RIPv2 request packets received by the RIP process.
v2RequestsIgnored	long	vRtrRipIfStatV2BadRequests	vRtrRipIfStatV2BadRequests is the number of RIPv2 request packets received by the RIP process that were subsequently discarded for any reason.
v2Updates	long	vRtrRipIfStatV2RcvUpdates	vRtrRipIfStatV2RcvUpdates is the number of RIPv2 response packets received by the RIP process.
v2UpdatesIgnored	long	vRtrRipIfStatV2BadUpdates	vRtrRipIfStatV2BadUpdates is the number of RIPv2 response packets received by the RIP process which were subsequently discarded for any reason.
InterfaceTransmitStats MIB table name: TIMETRA-RIP-MIB.vRtrRipIfStatTable Monitored class: rip.Interface			
totalUpdates	long	vRtrRipIfStatAllSentUpdates	vRtrRipIfStatAllSentUpdates is the number of all RIP updates actually sent on this interface. This explicitly does include full updates sent containing new information.

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5620 SAM counter name	Type	MIB counter name	Description
triggeredUpdates	long	vRtrRipIfStatAllTriggeredUpdates	vRtrRipIfStatAllTriggeredUpdates is the number of triggered RIP updates actually sent on this interface. This explicitly does include full updates sent containing new information.

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Table I-34 rsvp statistics

5620 SAM counter name	Type	MIB counter name	Description
AuthenticationKeyStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.AuthenticationKey			
errorPacketsReceived	UINT128	vRtrRsvpIfStatRxAuthErrors	The total number of RSVP packets with MD5 errors received on this RSVP interface.
errorPacketsTransmitted	UINT128	vRtrRsvpIfStatTxAuthErrors	The total number of RSVP packets with MD5 errors sent by this RSVP interface.
RsvpInterfaceReceiveStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.Interface			
acks	UINT128	vRtrRsvpIfStatRxAcks	The total number of RSVP ACK messages received when refresh reduction is enabled on this RSVP interface.
acks	UINT128	vRtrRsvpIfStatTxAcks	The total number of RSVP ACK messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatRxBundles	The total number of RSVP bundled packets received on this RSVP interface. Bundled packets are sent when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatTxBundles	The total number of RSVP bundled packets that have been transmitted on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatRxErrorPkts	The total number of RSVP packets with errors received on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatTxErrorPkts	The total number of RSVP packets with errors that have been transmitted on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatRxHelloReqs	The total number of RSVP HELLO REQ messages received on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatTxHelloReqs	The total number of RSVP HELLO REQ packets that have been transmitted on this RSVP interface.
helloTimeout	long	vRtrRsvpIfStatHelloTimeout	The total number of hello messages that timed out on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatRxPkts	The total number of error free RSVP packets received on this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
packets	UINT128	vRtrRsvpIfStatTxPkts	The total number of error free RSVP packets that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatRxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatTxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted from this RSVP interface.
paths	UINT128	vRtrRsvpIfStatRxPaths	The total number of RSVP PATH messages that have been received on this RSVP interface.
paths	UINT128	vRtrRsvpIfStatTxPaths	The total number of RSVP PATH messages that have been transmitted from this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatRxPathTears	The total number of RSVP PATH TEAR messages that have been received on this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatTxPathTears	The total number of RSVP PATH TEAR messages that have been transmitted from this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatRxSRefreshes	The total number of RSVP summary refresh, SREFRESH, messages received on this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatTxSRefreshes	The total number of summary refresh, SREFRESH, messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
reserveConfirms	UINT128	vRtrRsvpIfStatRxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been received on this RSVP interface.
reserveConfirms	UINT128	vRtrRsvpIfStatTxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been transmitted from this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatRxResvErrors	The total number of RSVP RESV ERROR messages that have been received on this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatTxResvErrors	The total number of RSVP RESV ERROR messages that have been transmitted from this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatRxResvs	The total number of RSVP RESV messages that have been received on this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatTxResvs	The total number of RSVP RESV messages that have been transmitted from this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatRxResvTears	The total number of RSVP RESV TEAR messages that have been received on this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatTxResvTears	The total number of RSVP RESV TEAR messages that have been transmitted from this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
totalPackets	UINT128	vRtrRsvpIfStatRxTotalPkts	The total number of RSVP packets, including errors, received on this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatTxTotalPkts	The total number of RSVP packets, including error packets, that have been transmitted on this RSVP interface.
RsvpInterfaceStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfTable Monitored class: rsvp.Interface			
activeReservations	long	vRtrRsvpIfActiveReservationCount	The total number of active RSVP sessions that have reserved bandwidth.
activeSessions	long	vRtrRsvpIfActiveSessionCount	The total number of active RSVP sessions on this interface. This count includes sessions that have requested bandwidth as well as sessions that have not requested any bandwidth.
bandwidth	long	vRtrRsvpIfBandwidth	The value of vRtrRsvpIfBandwidth specifies the amount of bandwidth in mega-bits per second (Mbps) available to be reserved for the RSVP protocol on this interface. This is typically the (port Speed * subscription Percentage).
reservedBandwidth	long	vRtrRsvpIfReservedBandwidth	The value of vRtrRsvpIfReservedBandwidth specifies the amount of bandwidth in mega-bits per second (Mbps) to reserved by the RSVP sessions on this interface. A value of zero (0) indicates that no bandwidth is reserved.
totalSessions	long	vRtrRsvpIfTotalSessionCount	The total number of RSVP sessions on this interface. This count includes sessions that are active as well as sessions that have been signalled but a response has not yet been received.
RsvpInterfaceTransmitStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpIfStatTable Monitored class: rsvp.Interface			
acks	UINT128	vRtrRsvpIfStatRxAcks	The total number of RSVP ACK messages received when refresh reduction is enabled on this RSVP interface.
acks	UINT128	vRtrRsvpIfStatTxAcks	The total number of RSVP ACK messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatRxBundles	The total number of RSVP bundled packets received on this RSVP interface. Bundled packets are sent when refresh reduction is enabled.
bundles	UINT128	vRtrRsvpIfStatTxBundles	The total number of RSVP bundled packets that have been transmitted on this RSVP interface.
errorPackets	UINT128	vRtrRsvpIfStatRxErrorPkts	The total number of RSVP packets with errors received on this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
errorPackets	UINT128	vRtrRsvpIfStatTxErrorPkts	The total number of RSVP packets with errors that have been transmitted on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatRxHelloReqs	The total number of RSVP HELLO REQ messages received on this RSVP interface.
hellos	UINT128	vRtrRsvpIfStatTxHelloReqs	The total number of RSVP HELLO REQ packets that have been transmitted on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatRxPkts	The total number of error free RSVP packets received on this RSVP interface.
packets	UINT128	vRtrRsvpIfStatTxPkts	The total number of error free RSVP packets that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatRxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted on this RSVP interface.
pathErrors	UINT128	vRtrRsvpIfStatTxPathErrors	The total number of RSVP PATH ERROR messages that have been transmitted from this RSVP interface.
paths	UINT128	vRtrRsvpIfStatRxPaths	The total number of RSVP PATH messages that have been received on this RSVP interface.
paths	UINT128	vRtrRsvpIfStatTxPaths	The total number of RSVP PATH messages that have been transmitted from this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatRxPathTears	The total number of RSVP PATH TEAR messages that have been received on this RSVP interface.
pathTears	UINT128	vRtrRsvpIfStatTxPathTears	The total number of RSVP PATH TEAR messages that have been transmitted from this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatRxSRefreshes	The total number of RSVP summary refresh, SREFRESH, messages received on this RSVP interface.
refreshes	UINT128	vRtrRsvpIfStatTxSRefreshes	The total number of summary refresh, SREFRESH, messages that have been transmitted on this RSVP interface when refresh reduction is enabled.
reserveConfirms	UINT128	vRtrRsvpIfStatRxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been received on this RSVP interface.
reserveConfirms	UINT128	vRtrRsvpIfStatTxResvConfirms	The total number of RSVP RESV CONFIRM messages that have been transmitted from this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatRxResvErrors	The total number of RSVP RESV ERROR messages that have been received on this RSVP interface.
reserveErrors	UINT128	vRtrRsvpIfStatTxResvErrors	The total number of RSVP RESV ERROR messages that have been transmitted from this RSVP interface.

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5620 SAM counter name	Type	MIB counter name	Description
reserves	UINT128	vRtrRsvpIfStatRxResvs	The total number of RSVP RESV messages that have been received on this RSVP interface.
reserves	UINT128	vRtrRsvpIfStatTxResvs	The total number of RSVP RESV messages that have been transmitted from this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatRxResvTears	The total number of RSVP RESV TEAR messages that have been received on this RSVP interface.
reserveTears	UINT128	vRtrRsvpIfStatTxResvTears	The total number of RSVP RESV TEAR messages that have been transmitted from this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatRxTotalPkts	The total number of RSVP packets, including errors, received on this RSVP interface.
totalPackets	UINT128	vRtrRsvpIfStatTxTotalPkts	The total number of RSVP packets, including error packets, that have been transmitted on this RSVP interface.
RsvpSessionStats MIB table name: TIMETRA-RSVP-MIB.vRtrRsvpSessionStatTable Monitored class: rsvp.Session			
detourAge	long	vRtrRsvpSessionDetourAge	vRtrRsvpSessionDetourAge is the age (i.e., time from creation till now) of this detour LSP in 10-millisecond periods.
detourTimeUp	long	vRtrRsvpSessionDetourTimeUp	vRtrRsvpSessionDetourTimeUp is the total time in 10-millisecond units that the detour LSP has been operational.
pathsReceived	UINT128	vRtrRsvpSessionRxPaths	The total number of RSVP PATH messages received for this RSVP session.
pathsTransmitted	UINT128	vRtrRsvpSessionTxPaths	The total number of RSVP PATH messages transmitted for this RSVP session.
refreshPathsReceived	UINT128	vRtrRsvpSessionRxSrefreshPaths	The value of vRtrRsvpSessionRxSrefreshPaths indicates the number of times PATH was refreshed using message ID from full PATH refresh or Srefresh message for this RSVP session.
refreshPathsTransmitted	UINT128	vRtrRsvpSessionTxSrefreshPaths	The value of vRtrRsvpSessionTxSrefreshPaths indicates the number of times PATH refresh for the session was sent as a part of a Srefresh message.
refreshReservesReceived	UINT128	vRtrRsvpSessionRxSrefreshResvs	The value of vRtrRsvpSessionRxSrefreshResvs indicates the number of times RESV was refreshed using message ID from full RESV refresh or Srefresh message for this RSVP session.
refreshReservesTransmitted	UINT128	vRtrRsvpSessionTxSrefreshResvs	The value of vRtrRsvpSessionTxSrefreshResvs indicates the number of times RESV refresh for the session was sent as a part of a Srefresh message.
reservesReceived	UINT128	vRtrRsvpSessionRxResvs	The total number of RSVP RESV messages received for this RSVP session.

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5620 SAM counter name	Type	MIB counter name	Description
reservesTransmitted	UINT128	vRtrRsvpSessionTxResvs	The total number of RSVP RESV messages transmitted for this RSVP session.

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Table I-35 rtr statistics

5620 SAM counter name	Type	MIB counter name	Description
CpeCheckStats MIB table name: TIMETRA-VRTR-MIB.vRtrInetStatRteCpeChkStatsTable Monitored class: rtr.StaticRoute			
downTransitions	long	vRtrInetStatRteCpeChkDownTrans	The value of vRtrInetStatRteCpeChkDownTrans indicates the number of times the CPE has transitioned to the unavailable state.
echoReplyPacketsReceived	long	vRtrInetStatRteCpeChkInPktCnt	The value of vRtrInetStatRteCpeChkInPktCnt indicates the number of echo-reply packets received.
echoRequestPacketsSent	long	vRtrInetStatRteCpeChkOutPktCnt	The value of vRtrInetStatRteCpeChkOutPktCnt indicates the number of echo-request packets sent.
hostUpDownTime	long	vRtrInetStatRteCpeChkUpTime	The value of vRtrInetStatRteCpeChkUpTime indicates how long (in hundredths of a second) that the CPE has been available.
ttl	long	vRtrInetStatRteCpeChkTTL	The value of vRtrInetStatRteCpeChkTTL indicates the time, in seconds, before the CPE will be declared down. Upon receipt of an echo reply, it has the value of vRtrInetStaticRouteCpeInterval * vRtrInetStaticRouteCpeDropCnt and is decremented by 1 every second.
upTransitions	long	vRtrInetStatRteCpeChkUpTrans	The value of vRtrInetStatRteCpeChkUpTrans indicates the number of times the CPE has transitioned to the available state.
DhcpRelayStats MIB table name: TIMETRA-VRTR-MIB.vRtrIfDHCPRelayStatsTable Monitored classes: • rtr.DhcpRelayConfiguration • rtr.SubItfDhcpRelayCfg • rtr.GrpItfDhcpRelayCfg			
authPktsDiscarded	long	vRtrIfDHCPRelayAuthPktsDiscarded	vRtrIfDHCPRelayAuthPktsDiscarded indicates the total number of packets discarded because authentication was not successful.
authPktsSuccess	long	vRtrIfDHCPRelayAuthPktsSuccess	vRtrIfDHCPRelayAuthPktsSuccess indicates the total number of packets for which authentication was successful.

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5620 SAM counter name	Type	MIB counter name	Description
clientPacketsDiscarded	long	vRtrIfDHCPRelayClientPktsDiscarded	vRtrIfDHCPRelayClientPktsDiscarded indicates the total number of client packets dicarded by the DHCP relay agent.
clientPacketsRelayed	long	vRtrIfDHCPRelayClientPktsRelayed	vRtrIfDHCPRelayClientPktsRelayed indicates the total number of client packets relayed by the DHCP relay agent.
clientPktsProxLS	long	vRtrIfDHCPRelayClientPktsProxLS	vRtrIfDHCPRelayClientPktsProxLS indicates the total number of client packets proxied by the DHCP relay agent based on a lease state. The lease itself can have been obtained from a DHCP or RADIUS server. This is the so called lease split functionality.
clientPktsProxRad	long	vRtrIfDHCPRelayClientPktsProxRad	vRtrIfDHCPRelayClientPktsProxRad indicates the total number of client packets proxied by the DHCP relay agent based on data received from a RADIUS server.
clientPktsProxRad	long	vRtrIfDHCPRelayClientPktsSnooped	vRtrIfDHCPRelayClientPktsSnooped indicates the total number of client packets snooped by the DHCP relay agent.
pktsGenRelease	long	vRtrIfDHCPRelayPktsGenRelease	vRtrIfDHCPRelayPktsGenRelease indicates the total number of DHCP RELEASE messages spoofed by the DHCP relay agent to the DHCP server.
receivedMalformedPackets	long	vRtrIfDHCPRelayRxMalformedPkts	vRtrIfDHCPRelayRxMalformedPkts indicates the total number of malformed packets received by the DHCP relay agent.
receivedPackets	long	vRtrIfDHCPRelayRxPkts	vRtrIfDHCPRelayRxPkts indicates the total number of packets received by the DHCP relay agent.
receivedUntrustedPackets	long	vRtrIfDHCPRelayRxUntrustedPkts	vRtrIfDHCPRelayRxUntrustedPkts indicates the total number of untrusted packets received by the DHCP relay agent.
serverPacketsDiscarded	long	vRtrIfDHCPRelayServerPktsDiscarded	vRtrIfDHCPRelayServerPktsDiscarded indicates the total number of server packets discarded by the DHCP relay agent.
serverPacketsRelayed	long	vRtrIfDHCPRelayServerPktsRelayed	vRtrIfDHCPRelayServerPktsRelayed indicates the total number of server packets relayed by the DHCP relay agent.
serverPktsSnooped	long	vRtrIfDHCPRelayPktsGenForceRenew	vRtrIfDHCPRelayPktsGenForceRenew indicates the total number of DHCP FORCERENEW messages spoofed by the DHCP relay agent to the DHCP clients.
serverPktsSnooped	long	vRtrIfDHCPRelayServerPktsSnooped	vRtrIfDHCPRelayServerPktsSnooped indicates the total number of server packets snooped by the DHCP relay agent.
transmittedPackets	long	vRtrIfDHCPRelayTxPkts	vRtrIfDHCPRelayTxPkts indicates the total number of packets transmitted by the DHCP relay agent.

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5620 SAM counter name	Type	MIB counter name	Description
DhcpRelayV6Stats MIB table name: TIMETRA-SERV-MIB.svcIfDHCP6MsgStatTable Monitored class: rtr.DhcpRelayV6Configuration			
droppedPackets	long	svcIfDHCP6MsgStatsDropped	The value of svcIfDHCP6MsgStatsDropped indicates the number of DHCP6 packets were dropped on this service interface.
receivedPackets	long	svcIfDHCP6MsgStatsRcvd	The value of svcIfDHCP6MsgStatsRcvd indicates the number of DHCP6 packets were received on this service interface.
transmittedPackets	long	svcIfDHCP6MsgStatsSent	The value of svcIfDHCP6MsgStatsSent indicates the number of DHCP6 packets were sent on this service interface.
NetworkInterfaceURPFStats MIB table name: TIMETRA-VRTR-MIB.vRtrIfStatsTable Monitored class: rtr.NetworkInterface			
uRPFCheckFailPkts	UINT128	vRtrIfuRPFCheckFailPkts	The value of vRtrIfuRPFCheckFailPkts indicates the number of packets that fail uRPF check on this interface.
uRPFCheckFailPktsHigh32	long	vRtrIfuRPFCheckFailPktsHigh32	The value of vRtrIfuRPFCheckFailPktsHigh32 indicates the high 32 bits of the value of vRtrIfuRPFCheckFailPkts.
uRPFCheckFailPktsLow32	long	vRtrIfuRPFCheckFailPktsLow32	The value of vRtrIfuRPFCheckFailPktsLow32 indicates the lower 32 bits of the value of vRtrIfuRPFCheckFailPkts.
RouteStats MIB table name: TIMETRA-VRTR-MIB.vRtrStatTable Monitored classes: • rtr.VirtualRouter • vprn.Site			
activeARPEntries	long	vRtrStatActiveARPEntries	vRtrStatActiveARPEntries indicates the number of active ARP entries for the specified virtual router in the system.
aggregateActiveRoutes	long	vRtrAggregateActiveRoutes	vRtrAggregateActiveRoutes indicates the current number of active aggregate routes for this instance of the route table.
aggregateRoutes	long	vRtrAggregateRoutes	vRtrAggregateRoutes indicates the current number of aggregate routes for this instance of the route table.
bgpActiveRoutes	long	vRtrBGPActiveRoutes	vRtrBGPActiveRoutes indicates the current number of active bgp routes for this instance of the route table.
bgpRoutes	long	vRtrBGPRoutes	vRtrBGPRoutes indicates the current number of bgp routes for this instance of the route table.
bgpVpnActiveRoutes	long	vRtrStatBGPVpnActiveRoutes	vRtrStatBGPVpnActiveRoutes indicates the current number of active VPN-IPV4 routes learned by MP-BGP for this virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
bgpVpnRoutes	long	vRtrStatBGPVpnRoutes	vRtrStatBGPVpnRoutes indicates the current number of VPN-IPV4 routes learned by MP-BGP for this virtual router.
directActiveRoutes	long	vRtrDirectActiveRoutes	vRtrDirectActiveRoutes indicates the current number of active direct routes for this instance of the route table.
directRoutes	long	vRtrDirectRoutes	vRtrDirectRoutes indicates the current number of direct routes for this instance of the route table.
illegalLabelsReceived	long	vRtrStatIllegalLabels	vRtrStatIllegalLabels indicates the number of illegally received labels on this virtual router.
isisActiveRoutes	long	vRtrISISActiveRoutes	vRtrISISActiveRoutes indicates the current number of active isis routes for this instance of the route table.
isisRoutes	long	vRtrISISRoutes	vRtrISISRoutes indicates the current number of isis routes for this instance of the route table.
ldpActiveTunnels	long	vRtrStatActiveLdpTunnels	vRtrStatActiveLdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'ldp'.
ldpTunnels	long	vRtrStatTotalLdpTunnels	vRtrStatTotalLdpTunnels indicates the current number of both active and inactive LDP tunnels.
multicastRoutes	long	vRtrMulticastRoutes	vRtrMulticastRoutes indicates the current number of rows in the vRtrPimGrpSrcTable.
ospfActiveRoutes	long	vRtrOSPFActiveRoutes	vRtrOSPFActiveRoutes indicates the current number of active ospf routes for this instance of the route table.
ospfRoutes	long	vRtrOSPFRoutes	vRtrOSPFRoutes indicates the current number of ospf routes for this instance of the route table.
ripActiveRoutes	long	vRtrRIPActiveRoutes	vRtrRIPActiveRoutes indicates the current number of active rip routes for this instance of the route table.
ripRoutes	long	vRtrRIPRoutes	vRtrRIPRoutes indicates the current number of rip routes for this instance of the route table.
routerInterfacesActive	long	vRtrStatActiveIfs	vRtrStatActiveIfs indicates the current number of router interfaces with vRtrIfAdminState equal 'inService' on this virtual router.
routerInterfacesConfigured	long	vRtrStatConfiguredIfs	vRtrStatConfiguredIfs indicates the current number of router interfaces configured on this virtual router.
routesInVrf	long	vRtrStatCurrNumRoutes	vRtrStatCurrNumRoutes indicates the current number of routes in the VRF for this virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
sdpActiveTunnels	long	vRtrStatActiveSdpTunnels	vRtrStatActiveSdpTunnels indicates the current number of rows in the vRtrTunnelTable where vRtrTunnelType has a value of 'sdp'.
sdpTunnels	long	vRtrStatTotalSdpTunnels	vRtrStatTotalSdpTunnels indicates the current number of both active and inactive SDP tunnels.
staticActiveRoutes	long	vRtrStaticActiveRoutes	vRtrStaticActiveRoutes indicates the current number of active static routes for this instance of the route table.
staticRoutes	long	vRtrStaticRoutes	vRtrStaticRoutes indicates the current number of static routes for this instance of the route table.
totalARPEntries	long	vRtrStatTotalARPEntries	vRtrStatTotalARPEntries indicates the total number of active and inactive ARP entries for the specified virtual router in the system.
VirtualInterfaceIcmp6InStats MIB table name: TIMETRA-VRTR-MIB.vRtrIfIcmp6Table Monitored class: rtr.VirtualInterfaceIcmp6Configuration			
inDestinationUnreachable	long	vRtrIfIcmp6InDestUnreachs	The value of vRtrIfIcmp6InDestUnreachs indicates the number of ICMP Destination Unreachable messages received by this interface.
inEchoReplies	long	vRtrIfIcmp6InEchoReplies	The value of vRtrIfIcmp6InEchoReplies indicates the number of ICMP Echo Reply messages received by this interface.
inEchoRequests	long	vRtrIfIcmp6InEchos	The value of vRtrIfIcmp6InEchos indicates the number of ICMP Echo (request) messages received by this interface.
inErrors	long	vRtrIfIcmp6InErrors	The value of vRtrIfIcmp6InErrors indicates the number of ICMP messages which this interface received but determined as having ICMP-specific errors (bad ICMP checksums, bad length , etc.).
inNeighborAdvertisements	long	vRtrIfIcmp6InNbrAdvertisements	The value of vRtrIfIcmp6InNbrAdvertisements indicates the number of ICMP Neighbor Advertisement messages received by this interface.
inNeighborSolicits	long	vRtrIfIcmp6InNbrSolicits	The value of vRtrIfIcmp6InNbrSolicits indicates the number of ICMP Neighbor Solicit messages received by this interface.
inPacketTooBig	long	vRtrIfIcmp6InPktTooBigs	The value of vRtrIfIcmp6InPktTooBigs indicates the number of ICMP Packet Too Big messages received by this interface.
inRedirects	long	vRtrIfIcmp6InRedirects	The value of vRtrIfIcmp6InRedirects indicates number of ICMP Redirect messages received by this interface.

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5620 SAM counter name	Type	MIB counter name	Description
inRouterAdvertisements	long	vRtrIfIcmp6InRtrAdvertisements	The value of vRtrIfIcmp6InRtrAdvertisements indicates the number of ICMP Router Advertisement messages received by this interface.
inRouterSolicits	long	vRtrIfIcmp6InRtrSolicits	The value of vRtrIfIcmp6InRtrSolicits indicates the number of ICMP Router Solicit messages received by this interface.
inTimeExceeded	long	vRtrIfIcmp6InTimeExcds	The value of vRtrIfIcmp6InTimeExcds indicates the number of ICMP Time Exceeded messages received by this interface.
inTotalMessages	long	vRtrIfIcmp6InMsgs	The value of vRtrIfIcmp6InMsgs indicates the total number of ICMP messages received by this interface which includes all those counted by vRtrIfIcmp6InErrors. Note that this interface is the interface to which the ICMP messages were addressed which may not be necessarily the input interface for the messages.
VirtualRouterIcmp6InStats MIB table name: TIMETRA-VRTR-MIB.vRtrIcmp6Table Monitored classes: • rtr.VirtualRouter • vprn.Site			
inDestinationUnreachable	long	vRtrIcmp6InDestUnreachs	The value of vRtrIcmp6InDestUnreachs indicates the number of ICMP Destination Unreachable messages received by this router instance.
inEchoReplies	long	vRtrIcmp6InEchoReplies	The value of vRtrIcmp6InEchoReplies indicates the number of ICMP Echo Reply messages received by this router instance.
inEchoRequests	long	vRtrIcmp6InEchos	The value of vRtrIcmp6InEchos indicates the number of ICMP Echo (request) messages received by this router instance.
inErrors	long	vRtrIcmp6InErrors	The value of vRtrIcmp6InErrors indicates the number of ICMP messages which this router instance received but determined as having ICMP-specific errors (bad ICMP checksums, bad length , etc.).
inNeighborAdvertisements	long	vRtrIcmp6InNbrAdvertisements	The value of vRtrIcmp6InNbrAdvertisements indicates the number of ICMP Neighbor Advertisement messages received by this router instance.
inNeighborSolicits	long	vRtrIcmp6InNbrSolicits	The value of vRtrIcmp6InNbrSolicits indicates the number of ICMP Neighbor Solicit messages received by this router instance.
inPacketTooBig	long	vRtrIcmp6InPktTooBigs	The value of vRtrIcmp6InPktTooBigs indicates the number of ICMP Packet Too Big messages received by this router instance.

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5620 SAM counter name	Type	MIB counter name	Description
inRedirects	long	vRtrIcmp6InRedirects	The value of vRtrIcmp6InRedirects indicates number of ICMP Redirect messages received by this router instance.
inRouterAdvertisements	long	vRtrIcmp6InRtrAdvertisements	The value of vRtrIcmp6InRtrAdvertisements indicates the number of ICMP Router Advertisement messages received by this router instance.
inRouterSolicits	long	vRtrIcmp6InRtrSolicits	The value of vRtrIcmp6InRtrSolicits indicates the number of ICMP Router Solicit messages received by this router instance.
inTimeExceeded	long	vRtrIcmp6InTimeExcds	The value of vRtrIcmp6InTimeExcds indicates the number of ICMP Time Exceeded messages received by this router instance.
inTotalMessages	long	vRtrIcmp6InMsgs	The value of vRtrIcmp6InMsgs indicates the total number of ICMP messages received by this router instance which includes all those counted by vRtrIcmp6InErrors.

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Table I-36 service statistics

5620 SAM counter name	Type	MIB counter name	Description
CemSapStats MIB table name: TIMETRA-SAP-MIB.sapCemStatsTable Monitored class: service.L2AccessInterface			
cemStatsEgressDroppedPkts	long	sapCemStatsEgressDroppedPkts	The value of sapCemStatsEgressDroppedPkts indicates the total number of packets that were dropped due to errors.
cemStatsEgressESs	long	sapCemStatsEgressESs	The value of sapCemStatsEgressESs indicates the number of Error Seconds (ESs) encountered. Any malformed packet, seq. error, LOPS and similar are considered as error seconds.
cemStatsEgressFailureCounts	long	sapCemStatsEgressFailureCounts	The value of sapCemStatsEgressFailureCounts indicates the number failure events. A failure event begins when the LOPS failure is declared, and ends when the failure is cleared.
cemStatsEgressForwardedPkts	long	sapCemStatsEgressForwardedPkts	The value of sapCemStatsEgressForwardedPkts indicates the number of packets that were successfully forwarded.
cemStatsEgressJtrBfrDepth	long	sapCemStatsEgressJtrBfrDepth	The value of sapCemStatsEgressJtrBfrDepth indicates the current packet depth of the jitter buffer.

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5620 SAM counter name	Type	MIB counter name	Description
cemStatsEgressJtrBfrOverruns	long	sapCemStatsEgressJtrBfrOverruns	The value of sapCemStatsEgressJtrBfrOverruns indicates the number of times a packet was dropped because it could not fit in the jitter buffer.
cemStatsEgressJtrBfrUnderruns	long	sapCemStatsEgressJtrBfrUnderruns	The value of sapCemStatsEgressJtrBfrUnderruns indicates the number of times a packet needed to be played out and the jitter buffer was empty.
cemStatsEgressLBitDropped	long	sapCemStatsEgressLBitDropped	The value of sapCemStatsEgressLBitDropped indicates the number of packets dropped due to the L bit set by the far end.
cemStatsEgressMalformedPkts	long	sapCemStatsEgressMalformedPkts	The value of sapCemStatsEgressMalformedPkts indicates the number of packets detected with unexpected size, or bad headers' stack.
cemStatsEgressMisOrderDropped	long	sapCemStatsEgressMisOrderDropped	The value of sapCemStatsEgressMisOrderDropped indicates the number of packets detected out of order (via control word sequence numbers), and could not be re-ordered, or could not be placed in the jitter buffer because it was out of the current window.
cemStatsEgressMissingPkts	long	sapCemStatsEgressMissingPkts	The value of sapCemStatsEgressMissingPkts indicates the number of missing packets (as detected via control word sequence number gaps).
cemStatsEgressMultipleDropped	long	sapCemStatsEgressMultipleDropped	The value of sapCemStatsEgressMultipleDropped indicates the number of packets dropped due to multiple sequence numbers.
cemStatsEgressOverrunCounts	long	sapCemStatsEgressOverrunCounts	The value of sapCemStatsEgressOverrunCounts indicates the number of times the jitter buffer went into an overrun state.
cemStatsEgressPktsReOrder	long	sapCemStatsEgressPktsReOrder	The value of sapCemStatsEgressPktsReOrder indicates the number of packets detected out of sequence (via control word sequence number), but successfully re-ordered.
cemStatsEgressSESs	long	sapCemStatsEgressSESs	The value of sapCemStatsEgressSESs indicates the number of Severely Error Seconds (SESs) encountered. This is when more than 30 percent of the packets within a one second window are missing.
cemStatsEgressUASs	long	sapCemStatsEgressUASs	The value of sapCemStatsEgressUASs indicates the number of Unavailable Seconds (UASs) encountered. Any consecutive ten seconds of SESs are counted as one UAS.

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5620 SAM counter name	Type	MIB counter name	Description
cemStatsEgressUnderrunCounts	long	sapCemStatsEgressUnderrunCounts	The value of sapCemStatsEgressUnderrunCounts indicates the number of times the jitter buffer went into an underrun state.
cemStatsIngressDroppedPkts	long	sapCemStatsIngressDroppedPkts	The value of sapCemStatsIngressDroppedPkts indicates the total number of packets that were dropped due to errors.
cemStatsIngressForwardedPkts	long	sapCemStatsIngressForwardedPkts	The value of sapCemStatsIngressForwardedPkts indicates the number of packets that were successfully forwarded.
L3AccessInterfaceURPFStats MIB table name: TIMETRA-VRTR-MIB.vRtrIfStatsTable Monitored class: service.L3AccessInterface			
uRPFCheckFailPkts	UINT128	vRtrIfuRPFCheckFailPkts	The value of vRtrIfuRPFCheckFailPkts indicates the number of packets that fail uRPF check on this interface.
uRPFCheckFailPktsHigh32	long	vRtrIfuRPFCheckFailPktsHigh32	The value of vRtrIfuRPFCheckFailPktsHigh32 indicates the high 32 bits of the value of vRtrIfuRPFCheckFailPkts.
uRPFCheckFailPktsLow32	long	vRtrIfuRPFCheckFailPktsLow32	The value of vRtrIfuRPFCheckFailPktsLow32 indicates the lower 32 bits of the value of vRtrIfuRPFCheckFailPkts.
PppoeSapStats MIB table name: TIMETRA-PPPOE-MIB.tmnxPppoeSapStatsTable Monitored classes: • ies.ServiceAccessPoint • vprn.ServiceAccessPoint • vpls.L2AccessInterface			
pppoeSapReceivedDropped	long	tmnxPppoeSapRxDropped	The value of tmnxPppoeSapRxDropped indicates the number of dropped PPPoE packets.
pppoeSapReceivedInvalidAcCookie	long	tmnxPppoeSapRxInvalidAcCookie	The value of tmnxPppoeSapRxInvalidAcCookie indicates the number of PPPoE Active Discovery packets received with an invalid AC-Cookie tag.
pppoeSapReceivedInvalidCode	long	tmnxPppoeSapRxInvalidCode	The value of tmnxPppoeSapRxInvalidCode indicates the number of PPPoE packets received with an invalid code field.
pppoeSapReceivedInvalidLen	long	tmnxPppoeSapRxInvalidLen	The value of tmnxPppoeSapRxInvalidLen indicates the number of PPPoE packets received with an invalid length field.
pppoeSapReceivedInvalidSession	long	tmnxPppoeSapRxInvalidSession	The value of tmnxPppoeSapRxInvalidSession indicates the number of PPPoE packets received with an invalid session-id field.

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5620 SAM counter name	Type	MIB counter name	Description
pppoeSapReceivedInvalidTags	long	tmnxPppoeSapRxInvalidTags	The value of tmnxPppoeSapRxInvalidTags indicates the number of PPPoE Active Discovery packets received with invalid tags.
pppoeSapReceivedInvalidType	long	tmnxPppoeSapRxInvalidType	The value of tmnxPppoeSapRxInvalidType indicates the number of PPPoE packets received with an invalid type field.
pppoeSapReceivedInvalidVersion	long	tmnxPppoeSapRxInvalidVersion	The value of tmnxPppoeSapRxInvalidVersion indicates the number of PPPoE packets received with an invalid version field.
pppoeSapReceivedPADI	long	tmnxPppoeSapRxPadi	The value of tmnxPppoeSapRxPadi indicates the number of PADI (PPPoE Active Discovery Initiation) packets received on this SAP.
pppoeSapReceivedPADR	long	tmnxPppoeSapRxPadr	The value of tmnxPppoeSapRxPadr indicates the number of PADR (PPPoE Active Discovery Request) packets received on this SAP.
pppoeSapReceivedPADT	long	tmnxPppoeSapRxPadt	The value of tmnxPppoeSapRxPadt indicates the number of PADT (PPPoE Active Discovery Terminate) packets received on this SAP.
pppoeSapReceivedSession	long	tmnxPppoeSapRxSession	The value of tmnxPppoeSapRxSession indicates the number packets received during the PPP session stage on this SAP.
pppoeSapTransmittedPADO	long	tmnxPppoeSapTxPado	The value of tmnxPppoeSapTxPado indicates the number of PADO (PPPoE Active Discovery Offer) packets transmitted on this SAP.
pppoeSapTransmittedPADS	long	tmnxPppoeSapTxPads	The value of tmnxPppoeSapTxPads indicates the number of PADS (PPPoE Active Discovery Session) packets transmitted on this SAP.
pppoeSapTransmittedPADT	long	tmnxPppoeSapTxPadt	The value of tmnxPppoeSapTxPadt indicates the number of PADT (PPPoE Active Discovery Terminate) packets transmitted on this SAP.
pppoeSapTransmittedSession	long	tmnxPppoeSapTxSession	The value of tmnxPppoeSapTxSession indicates the number packets transmitted during the PPP session stage on this SAP.
SapBaseStats MIB table name: TIMETRA-SAP-MIB.sapBaseStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
authenticationPacketsDiscarded	long	sapBaseStatsAuthenticationPktsDiscarded	The number of DHCP packets discarded as result of authentication.
authenticationPacketsSuccessful	long	sapBaseStatsAuthenticationPktsSuccess	The number of DHCP packets successfully authenticated.
customerId	long	sapBaseStatsCustId	The Customer ID for the associated service.

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5620 SAM counter name	Type	MIB counter name	Description
egressQChipDroppedInProfOctets	UINT128	sapBaseStatsEgressQchip DroppedInProfOctets	The number of in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipDroppedInProfPackets	UINT128	sapBaseStatsEgressQchip DroppedInProfPackets	The number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipDroppedOutProfOctets	UINT128	sapBaseStatsEgressQchip DroppedOutProfOctets	The number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipDroppedOutProfPackets	UINT128	sapBaseStatsEgressQchip DroppedOutProfPackets	The number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
egressQChipForwardedInProfOctets	UINT128	sapBaseStatsEgressQchip ForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
egressQChipForwardedInProfPackets	UINT128	sapBaseStatsEgressQchip ForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
egressQChipForwardedOutProfOctets	UINT128	sapBaseStatsEgressQchip ForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
egressQChipForwardedOutProfPackets	UINT128	sapBaseStatsEgressQchip ForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
ingressPChipDroppedOctets	UINT128	sapBaseStatsIngressPchip DroppedOctets	The number of octets dropped by the ingress Pchip due to: SAP state, ingress MAC, IP or IPv6 filter, same segment discard, bad checksum, etc.
ingressPChipDroppedPackets	UINT128	sapBaseStatsIngressPchip DroppedPackets	The number of packets dropped by the ingress Pchip due to: SAP state, ingress MAC, IP or IPv6 filter, same segment discard, bad checksum, etc.
ingressPChipOfferedHiPrioOctets	UINT128	sapBaseStatsIngressPchip OfferedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedHiPrioPackets	UINT128	sapBaseStatsIngressPchip OfferedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedLoPrioOctets	UINT128	sapBaseStatsIngressPchip OfferedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedLoPrioPackets	UINT128	sapBaseStatsIngressPchip OfferedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressPChipOfferedUncoloredOctets	UINT128	sapBaseStatsIngressPchip OfferedUncoloredOctets	The number of uncolored octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
ingressPChipOfferedUncoloredPackets	UINT128	sapBaseStatsIngressPchipOfferedUncoloredPackets	The number of uncolored packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
ingressQChipDroppedHiPrioOctets	UINT128	sapBaseStatsIngressQchipDroppedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipDroppedHiPrioPackets	UINT128	sapBaseStatsIngressQchipDroppedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipDroppedLoPrioOctets	UINT128	sapBaseStatsIngressQchipDroppedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipDroppedLoPrioPackets	UINT128	sapBaseStatsIngressQchipDroppedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
ingressQChipForwardedInProfOctets	UINT128	sapBaseStatsIngressQchipForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
ingressQChipForwardedInProfPackets	UINT128	sapBaseStatsIngressQchipForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
ingressQChipForwardedOutProfOctets	UINT128	sapBaseStatsIngressQchipForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
ingressQChipForwardedOutProfPackets	UINT128	sapBaseStatsIngressQchipForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
SapEgrQosHsmdaCntrStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosHsmdaCntrStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface • service.ServiceAccessPoint			
sapEgrHsmdaCntrStCounterId	long	sapEgrHsmdaCntrStCntrId	The value of sapEgrHsmdaCntrStCntrId indicates the counter ID for the statistics.
sapEgrHsmdaCntrStCustomerId	long	sapEgrHsmdaCntrStCustId	The value of sapEgrHsmdaCntrStCustId indicates the customer ID for the statistics.
sapEgrHsmdaCntrStInProfileOctetsFwd	UINT128	sapEgrHsmdaCntrStInProfOctFwd	The value of sapEgrHsmdaCntrStInProfOctFwd indicates the number of out-of-profile packets forwarded for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapEgrHsmdaCntrStInProfilePacketsDropped	UINT128	sapEgrHsmdaCntrStInProfPktDrop	The value of sapEgrHsmdaCntrStInProfPktDrop indicates the number of in-profile packets dropped for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStInProfilePacketsFwd	UINT128	sapEgrHsmdaCntrStInProfPktFwd	The value of sapEgrHsmdaCntrStInProfPktFwd indicates the number of in-profile packets forwarded for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStInProfOctetsDropped	UINT128	sapEgrHsmdaCntrStInProfOctDrop	The value of sapEgrHsmdaCntrStInProfOctDrop indicates the number of out-of-profile packets dropped for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStOutProfileOctetsDropped	UINT128	sapEgrHsmdaCntrStOutProfOctDrop	The value of sapEgrHsmdaCntrStOutProfOctDrop indicates the number of out-of-profile packets dropped for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStOutProfileOctetsFwd	UINT128	sapEgrHsmdaCntrStOutProfOctFwd	The value of sapEgrHsmdaCntrStOutProfOctFwd indicates the number of out-of-profile packets forwarded for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStOutProfilePacketsDropped	UINT128	sapEgrHsmdaCntrStOutProfPktDrop	The value of sapEgrHsmdaCntrStOutProfPktDrop indicates the number of out-of-profile packets dropped for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapEgrHsmdaCntrStOutProfilePacketsFwd	UINT128	sapEgrHsmdaCntrStOutProfPktFwd	The value of sapEgrHsmdaCntrStOutProfPktFwd indicates the number of out-of-profile packets forwarded for the egress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
SapEgrQosHsmdaQueueStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosHsmdaQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface • service.ServiceAccessPoint			
sapEgrHsmdaQStatCustomerId	long	sapEgrHsmdaQStatCustId	The value of sapEgrHsmdaQStatCustId indicates the customer ID for the statistics.
sapEgrHsmdaQStatInProfileOctetsDropped	UINT128	sapEgrHsmdaQStatInProfOctDropd	The value of sapEgrHsmdaQStatInProfOctDropd indicates the number of out-of-profile packets dropped on egress on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapEgrHsmdaQStatInProfileOctetsFwd	UINT128	sapEgrHsmdaQStatInProfOctFwd	The value of sapEgrHsmdaQStatInProfOctFwd indicates the number of out-of-profile packets forwarded on egress on this SAP.
sapEgrHsmdaQStatInProfilePacketsDropped	UINT128	sapEgrHsmdaQStatInProfPktDropd	The value of sapEgrHsmdaQStatInProfPktDropd indicates the number of in-profile packets dropped on egress on this SAP.
sapEgrHsmdaQStatInProfilePacketsFwd	UINT128	sapEgrHsmdaQStatInProfPktFwd	The value of sapEgrHsmdaQStatInProfPktFwd indicates the number of in-profile packets forwarded on egress on this SAP.
sapEgrHsmdaQStatOutProfileOctetsDropped	UINT128	sapEgrHsmdaQStatOutProfOctDropd	The value of sapEgrHsmdaQStatOutProfOctDropd indicates the number of out-of-profile packets dropped on egress on this SAP.
sapEgrHsmdaQStatOutProfileOctetsFwd	UINT128	sapEgrHsmdaQStatOutProfOctFwd	The value of sapEgrHsmdaQStatOutProfOctFwd indicates the number of out-of-profile packets forwarded on egress on this SAP.
sapEgrHsmdaQStatOutProfilePacketsDropped	UINT128	sapEgrHsmdaQStatOutProfPktDropd	The value of sapEgrHsmdaQStatOutProfPktDropd indicates the number of out-of-profile packets dropped on egress on this SAP.
sapEgrHsmdaQStatOutProfilePacketsFwd	UINT128	sapEgrHsmdaQStatOutProfPktFwd	The value of sapEgrHsmdaQStatOutProfPktFwd indicates the number of out-of-profile packets forwarded on egress on this SAP.
sapEgrHsmdaQStatQueueId	long	sapEgrQosHsmdaQueueId	The value of sapEgrQosHsmdaQueueId index specifies the Hsmda egress queue which this override record will affect.
SapEgrQosPlcyQueueStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosPlcyQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedInProfOctets	UINT128	sapEgQosPlcyQueueStatsDroppedInProfOctets	The value of sapEgQosPlcyQueueStatsDroppedInProfOctets indicates the number in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedInProfPackets	UINT128	sapEgQosPlcyQueueStatsDroppedInProfPackets	The value of sapEgQosPlcyQueueStatsDroppedInProfPackets indicates the number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfOctets	UINT128	sapEgQosPlcyQueueStatsDroppedOutProfOctets	The value of sapEgQosPlcyQueueStatsDroppedOutProfOctets indicates the number out-of-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.

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5620 SAM counter name	Type	MIB counter name	Description
droppedOutProfPackets	UINT128	sapEgQosPlcyQueueStats DroppedOutProfPackets	The value of sapEgQosPlcyQueueStatsDroppedOutProfPackets indicates the number out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapEgQosPlcyQueueStats ForwardedInProfOctets	The value of sapEgQosPlcyQueueStatsForwardedInProfOctets indicates the number ofin-profile octets (rate below CIR) forwarded by the egress Qchip.
forwardedInProfPackets	UINT128	sapEgQosPlcyQueueStats ForwardedInProfPackets	The value of sapEgQosPlcyQueueStatsForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
forwardedOutProfOctets	UINT128	sapEgQosPlcyQueueStats ForwardedOutProfOctets	The value of sapEgQosPlcyQueueStatsForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
forwardedOutProfPackets	UINT128	sapEgQosPlcyQueueStats ForwardedOutProfPackets	The value of sapEgQosPlcyQueueStatsForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
policyId	long	sapEgQosPlcyQueuePlcyId	The row index in the tSapEgressTable corresponding to this egress QoS policy.
queueId	long	sapEgQosPlcyQueueId	The value of sapEgQosPlcyQueueId indicates index of the egress QoS queue of this SAP.
SapEgrQosPlcyStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedInProfOctets	UINT128	sapEgQosPlcyDroppedInProfOctets	The value of the object sapEgQosPlcyDroppedInProfOctets indicates the number of in-profile octets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedInProfPackets	UINT128	sapEgQosPlcyDroppedInProfPackets	The value of the object sapEgQosPlcyDroppedInProfPackets indicates the number of in-profile packets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.

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5620 SAM counter name	Type	MIB counter name	Description
droppedOutProfOctets	UINT128	sapEgQosPlcyDroppedOutProfOctets	The value of the object sapEgQosPlcyDroppedOutProfOctets indicates the number of out-profile octets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfPackets	UINT128	sapEgQosPlcyDroppedOutProfPackets	The value of the object sapEgQosPlcyDroppedOutProfPackets indicates the number of out-profile packets, as determined by the SAP egress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapEgQosPlcyForwardedInProfOctets	The value of the object sapEgQosPlcyForwardedInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
forwardedInProfPackets	UINT128	sapEgQosPlcyForwardedInProfPackets	The value of the object sapEgQosPlcyForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
forwardedOutProfOctets	UINT128	sapEgQosPlcyForwardedOutProfOctets	The value of the object sapEgQosPlcyForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
forwardedOutProfPackets	UINT128	sapEgQosPlcyForwardedOutProfPackets	The value of the object sapEgQosPlcyForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
policyId	long	sapEgQosPlcyId	The value of the object sapEgQosPlcyId indicates the row index in the tSapEgressTable corresponding to this egress QoS policy, or one if no policy is specified.
SapEgrQosQueueStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
customerId	long	sapEgrQosCustId	The Customer ID for the associated service.
droppedInProfOctets	UINT128	sapEgrQosQueueStatsDroppedInProfOctets	The number of in-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedInProfPackets	UINT128	sapEgrQosQueueStatsDroppedInProfPackets	The number of in-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.

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5620 SAM counter name	Type	MIB counter name	Description
droppedOutProfOctets	UINT128	sapEgrQosQueueStatsDroppedOutProfOctets	The number of out-of-profile octets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedOutProfPackets	UINT128	sapEgrQosQueueStatsDroppedOutProfPackets	The number of out-of-profile packets discarded by the egress Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapEgrQosQueueStatsForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the egress Qchip.
forwardedInProfPackets	UINT128	sapEgrQosQueueStatsForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the egress Qchip.
forwardedOutProfOctets	UINT128	sapEgrQosQueueStatsForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the egress Qchip.
forwardedOutProfPackets	UINT128	sapEgrQosQueueStatsForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the egress Qchip.
queueId	long	sapEgrQosQueueId	The index of the egress QoS queue of this SAP.
SapEgrQosSchedStats MIB table name: TIMETRA-SAP-MIB.sapEgrQosSchedStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
customerId	long	sapEgrQosSchedCustId	The Customer ID for the associated service.
forwardedOctets	UINT128	sapEgrQosSchedStatsForwardedOctets	The number of forwarded octets by the egress Qchip, as determined by the SAP egress scheduler policy.
forwardedPackets	UINT128	sapEgrQosSchedStatsForwardedPackets	The number of forwarded packets by the egress Qchip, as determined by the SAP egress scheduler policy.
qosSchedName	String	sapEgrQosSchedName	The index of the egress QoS scheduler of this SAP.
SapEgrSchedPlcyPortStats MIB table name: TIMETRA-SAP-MIB.sapEgrSchedPlcyPortStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapEgrSchedPlcyPortStatsFwdOct	The value of sapEgrSchedPlcyPortStatsFwdOct indicates the number of forwarded octets,as determined by the SAP egress scheduler policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
forwardedPackets	UINT128	sapEgrSchedPlcyPortStatsFwdPkt	The value of sapEgrSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the SAP egress scheduler policy, offered by the Pchip to the Qchip.
SapEgrSchedPlcyStats MIB table name: TIMETRA-SAP-MIB.sapEgrSchedPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapEgrSchedPlcyStatsFwdOct	The number of octets forwarded by the egress Qchip, as determined by the SAP egress scheduler policy.
forwardedPackets	UINT128	sapEgrSchedPlcyStatsFwdPkt	The number of packets forwarded by the egress Qchip, as determined by the SAP egress scheduler policy.
SapIngQosHsmdaCntrStats MIB table name: TIMETRA-SAP-MIB.sapIngQosHsmdaCntrStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface • service.ServiceAccessPoint			
sapIngHsmdaCntrStAllOctetsOffered	UINT128	sapIngHsmdaCntrStAllOctOffered	The value of sapIngHsmdaCntrStAllOctOffered indicates the total number of octets offered on ingress on this SAP.
sapIngHsmdaCntrStAllPacketsOffered	UINT128	sapIngHsmdaCntrStAllPktOffered	The value of sapIngHsmdaCntrStAllPktOffered indicates the total number of packets offered on ingress on this SAP.
sapIngHsmdaCntrStCounterId	long	sapIngHsmdaCntrStCntrId	The value of sapIngHsmdaCntrStCntrId indicates the counter ID for the statistics.
sapIngHsmdaCntrStCusomerId	long	sapIngHsmdaCntrStCustId	The value of sapIngHsmdaCntrStCustId indicates the customer ID for the statistics.
sapIngHsmdaCntrStHiOctetsDropped	UINT128	sapIngHsmdaCntrStHiOctDrop	The value of sapIngHsmdaCntrStHiOctDrop indicates the number of high-priority octets dropped for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStHiPacketsDropped	UINT128	sapIngHsmdaCntrStHiPktDrop	The value of sapIngHsmdaCntrStHiPktDrop indicates the number of high-priority packets dropped for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStInProfileOctetsFwd	UINT128	sapIngHsmdaCntrStInProfOctFwd	The value of sapIngHsmdaCntrStInProfOctFwd indicates the number of out-of-profile packets forwarded for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapIngHsmdaCntrStInProfilePacketsFwd	UINT128	sapIngHsmdaCntrStInProfPktFwd	The value of sapIngHsmdaCntrStInProfPktFwd indicates the number of in-profile packets forwarded for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStLoOctetsDropped	UINT128	sapIngHsmdaCntrStLoOctDrop	The value of sapIngHsmdaCntrStLoOctDrop indicates the number of low-priority octets dropped for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStLoPacketsDropped	UINT128	sapIngHsmdaCntrStLoPktDrop	The value of sapIngHsmdaCntrStLoPktDrop indicates the number of low-priority packets dropped for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStOutProfileOctetsFwd	UINT128	sapIngHsmdaCntrStOutProfOctFwd	The value of sapIngHsmdaCntrStOutProfOctFwd indicates the number of out-of-profile packets forwarded for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
sapIngHsmdaCntrStOutProfilePacketsFwd	UINT128	sapIngHsmdaCntrStOutProfPktFwd	The value of sapIngHsmdaCntrStOutProfPktFwd indicates the number of out-of-profile packets forwarded for the ingress counter, specified by the index sapIngHsmdaCntrStCntrId, on this SAP.
SapIngQosHsmdaQueueStats MIB table name: TIMETRA-SAP-MIB.sapIngQosHsmdaQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface • service.ServiceAccessPoint			
sapIngHsmdaQStatAllOctetsOffered	UINT128	sapIngHsmdaQStatAllOctsOffered	The value of sapIngHsmdaQStatAllOctsOffered indicates the total number of octets offered on ingress on this SAP.
sapIngHsmdaQStatAllPacketsOffered	UINT128	sapIngHsmdaQStatAllPktsOffered	The value of sapIngHsmdaQStatAllPktsOffered indicates the total number of packets offered on ingress on this SAP.
sapIngHsmdaQStatCustomerId	long	sapIngHsmdaQStatCustId	The value of sapIngHsmdaQStatCustId indicates the customer ID for the statistics.
sapIngHsmdaQStatHiOctetsDropped	UINT128	sapIngHsmdaQStatHiOctsDropped	The value of sapIngHsmdaQStatHiOctsDropped indicates the number of high-priority octets dropped on ingress on this SAP.
sapIngHsmdaQStatHiPacketsDropped	UINT128	sapIngHsmdaQStatHiPktsDropped	The value of sapIngHsmdaQStatHiPktsDropped indicates the number of high-priority packets dropped on ingress on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapIngHsmdaQStatInProfileOctetsFwd	UINT128	sapIngHsmdaQStatInProfOctsFwd	The value of sapIngHsmdaQStatInProfOctsFwd indicates the number of out-of-profile packets forwarded on ingress on this SAP.
sapIngHsmdaQStatInProfilePacketsFwd	UINT128	sapIngHsmdaQStatInProfPktsFwd	The value of sapIngHsmdaQStatInProfPktsFwd indicates the number of in-profile packets forwarded on ingress on this SAP.
sapIngHsmdaQStatLoOctetsDropped	UINT128	sapIngHsmdaQStatLoOctsDropped	The value of sapIngHsmdaQStatLoOctsDropped indicates the number of low-priority octets dropped on ingress on this SAP.
sapIngHsmdaQStatLoPacketsDropped	UINT128	sapIngHsmdaQStatLoPktsDropped	The value of sapIngHsmdaQStatLoPktsDropped indicates the number of low-priority packets dropped on ingress on this SAP.
sapIngHsmdaQStatOutProfileOctetsFwd	UINT128	sapIngHsmdaQStatOutProfOctsFwd	The value of sapIngHsmdaQStatOutProfOctsFwd indicates the number of out-of-profile packets forwarded on ingress on this SAP.
sapIngHsmdaQStatOutProfilePacketsFwd	UINT128	sapIngHsmdaQStatOutProfPktsFwd	The value of sapIngHsmdaQStatOutProfPktsFwd indicates the number of out-of-profile packets forwarded on ingress on this SAP.
sapIngHsmdaQStatQueueId	long	sapIngQosHsmdaQueueId	The value of sapIngQosHsmdaQueueId index specifies the Hsmda egress queue which this override record will affect.
SapIngQosPlcyQueueStats MIB table name: TIMETRA-SAP-MIB.sapIngQosPlcyQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedHiPrioOctets	UINT128	sapIgQosPlcyQueueStatsDroppedHiPrioOctets	The value of sapIgQosPlcyQueueStatsDroppedHiPrioOctets indicates the number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedHiPrioPackets	UINT128	sapIgQosPlcyQueueStatsDroppedHiPrioPackets	The value of sapIgQosPlcyQueueStatsDroppedHiPrioPackets indicates the number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioOctets	UINT128	sapIgQosPlcyQueueStatsDroppedLoPrioOctets	The value of sapIgQosPlcyQueueStatsDroppedLoPrioOctets indicates the number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.

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5620 SAM counter name	Type	MIB counter name	Description
droppedLoPrioPackets	UINT128	sapIgQosPlcyQueueStatsDroppedLoPrioPackets	The value of sapIgQosPlcyQueueStatsDroppedLoPrioPackets indicates the number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapIgQosPlcyQueueStatsForwardedInProfOctets	The value of sapIgQosPlcyQueueStatsForwardedInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
forwardedInProfPackets	UINT128	sapIgQosPlcyQueueStatsForwardedInProfPackets	The value of sapIgQosPlcyQueueStatsForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
forwardedOutProfOctets	UINT128	sapIgQosPlcyQueueStatsForwardedOutProfOctets	The value of sapIgQosPlcyQueueStatsForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
forwardedOutProfPackets	UINT128	sapIgQosPlcyQueueStatsForwardedOutProfPackets	The value of sapIgQosPlcyQueueStatsForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
offeredHiPrioOctets	UINT128	sapIgQosPlcyQueueStatsOfferedHiPrioOctets	The value of sapIgQosPlcyQueueStatsOfferedHiPrioOctets indicates the number of high priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredHiPrioPackets	UINT128	sapIgQosPlcyQueueStatsOfferedHiPrioPackets	The value of sapIgQosPlcyQueueStatsOfferedHiPrioPackets indicates the number of high priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredLoPrioOctets	UINT128	sapIgQosPlcyQueueStatsOfferedLoPrioOctets	The value of sapIgQosPlcyQueueStatsOfferedLoPrioOctets indicates the number of low priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredLoPrioPackets	UINT128	sapIgQosPlcyQueueStatsOfferedLoPrioPackets	The value of sapIgQosPlcyQueueStatsOfferedLoPrioPackets indicates the number of low priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
policyId	long	sapIgQosPlcyQueuePlcyId	The value of the object sapIgQosPlcyQueuePlcyId indicates the row index in the tSapIngressTable corresponding to this ingress QoS policy.

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5620 SAM counter name	Type	MIB counter name	Description
queueId	long	sapIgQosPlcyQueueId	The index of the ingress QoS queue of this SAP used by the policy indicated by sapIgQosPlcyQueuePlcyId.
uncoloredOctetsOffered	UINT128	sapIgQosPlcyQueueStatsUncoloredOctetsOffered	The value of sapIgQosPlcyQueueStatsUncoloredOctetsOffered indicates the number of uncolored octets offered to the ingress Qchip.
uncoloredPacketsOffered	UINT128	sapIgQosPlcyQueueStatsUncoloredPacketsOffered	The value of sapIgQosPlcyQueueStatsUncoloredPacketsOffered indicates the number of uncolored packets offered to the ingress Qchip.
SapIngQosPlcyStats MIB table name: TIMETRA-SAP-MIB.sapIngrQosPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
droppedHiPrioOctets	UINT128	sapIgQosPlcyDroppedHiPrioOctets	The value of the object sapIgQosPlcyDroppedHiPrioOctets indicates the number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedHiPrioPackets	UINT128	sapIgQosPlcyDroppedHiPrioPackets	The value of the object sapIgQosPlcyDroppedHiPrioPackets indicates the number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioOctets	UINT128	sapIgQosPlcyDroppedLoPrioOctets	The value of the object sapIgQosPlcyDroppedLoPrioOctets indicates the number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioPackets	UINT128	sapIgQosPlcyDroppedLoPrioPackets	The value of the object sapIgQosPlcyDroppedLoPrioPackets indicates the number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapIgQosPlcyForwardedInProfOctets	The value of the object sapIgQosPlcyForwardedInProfOctets indicates the number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
forwardedInProfPackets	UINT128	sapIgQosPlcyForwardedInProfPackets	The value of the object sapIgQosPlcyForwardedInProfPackets indicates the number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
forwardedOutProfOctets	UINT128	sapIgQosPlcyForwardedOutProfOctets	The value of the object sapIgQosPlcyForwardedOutProfOctets indicates the number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
forwardedOutProfPackets	UINT128	sapIgQosPlcyForwardedOutProfPackets	The value of the object sapIgQosPlcyForwardedOutProfPackets indicates the number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.
policyId	long	sapIgQosPlcyId	The value of the object sapIgQosPlcyId indicates the row index in the tSapIngressTable corresponding to this ingress QoS policy, or one if no policy is specified.
SapIngQosQueueStats MIB table name: TIMETRA-SAP-MIB.sapIngQosQueueStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
customerId	long	sapIngQosCustId	The Customer ID for the associated service.
droppedHiPrioOctets	UINT128	sapIngQosQueueStatsDroppedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedHiPrioPackets	UINT128	sapIngQosQueueStatsDroppedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioOctets	UINT128	sapIngQosQueueStatsDroppedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
droppedLoPrioPackets	UINT128	sapIngQosQueueStatsDroppedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, dropped by the Qchip due to: MBS exceeded, buffer pool limit exceeded, etc.
forwardedInProfOctets	UINT128	sapIngQosQueueStatsForwardedInProfOctets	The number of in-profile octets (rate below CIR) forwarded by the ingress Qchip.
forwardedInProfPackets	UINT128	sapIngQosQueueStatsForwardedInProfPackets	The number of in-profile packets (rate below CIR) forwarded by the ingress Qchip.
forwardedOutProfOctets	UINT128	sapIngQosQueueStatsForwardedOutProfOctets	The number of out-of-profile octets (rate above CIR) forwarded by the ingress Qchip.
forwardedOutProfPackets	UINT128	sapIngQosQueueStatsForwardedOutProfPackets	The number of out-of-profile packets (rate above CIR) forwarded by the ingress Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
offeredHiPrioOctets	UINT128	sapIngQosQueueStatsOfferedHiPrioOctets	The number of high priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredHiPrioPackets	UINT128	sapIngQosQueueStatsOfferedHiPrioPackets	The number of high priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredLoPrioOctets	UINT128	sapIngQosQueueStatsOfferedLoPrioOctets	The number of low priority octets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
offeredLoPrioPackets	UINT128	sapIngQosQueueStatsOfferedLoPrioPackets	The number of low priority packets, as determined by the SAP ingress QoS policy, offered by the Pchip to the Qchip.
queueId	long	sapIngQosQueueId	The index of the ingress QoS queue of this SAP.
uncoloredOctetsOffered	UINT128	sapIngQosQueueStatsUncoloredOctetsOffered	The number of uncolored octets offered to the ingress Qchip.
uncoloredPacketsOffered	UINT128	sapIngQosQueueStatsUncoloredPacketsOffered	The number of uncolored packets offered to the ingress Qchip.
SapIngQosSchedStats MIB table name: TIMETRA-SAP-MIB.sapIngQosSchedStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
customerId	long	sapIngQosSchedCustId	The Customer ID for the associated service.
forwardedOctets	UINT128	sapIngQosSchedStatsForwardedOctets	The number of forwarded octets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
forwardedPackets	UINT128	sapIngQosSchedStatsForwardedPackets	The number of forwarded packets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
qosSchedName	String	sapIngQosSchedName	The index of the ingress QoS scheduler of this SAP.
SapIngSchedPlcyPortStats MIB table name: TIMETRA-SAP-MIB.sapIngSchedPlcyPortStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapIngSchedPlcyPortStatsFwdOct	The value of sapIngSchedPlcyPortStatsFwdOct indicates the number of forwarded octets,as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
forwardedPackets	UINT128	sapIngSchedPlcyPortStatsFwdPkt	The value of sapIngSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.

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5620 SAM counter name	Type	MIB counter name	Description
SapIngSchedPlcyStats MIB table name: TIMETRA-SAP-MIB.sapIngSchedPlcyStatsTable Monitored classes: • service.L2AccessInterface • service.L3AccessInterface			
forwardedOctets	UINT128	sapIngSchedPlcyStatsFwdOct	The number of forwarded octets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
forwardedPackets	UINT128	sapIngSchedPlcyStatsFwdPkt	The number of forwarded packets, as determined by the SAP ingress scheduler policy, offered by the Pchip to the Qchip.
VdoGrpSrcAdiStats MIB table name: TIMETRA-VIDEO-MIB.tmnxVdoSGAdiStatTable Monitored class: service.ZoneAdiChl			
vdoSGAdiAbortReq	long	tmnxVdoSGAdiAbortReq	The value of tmnxVdoSGAdiAbortReq indicates the total number of abort requests received from the Ad Insert (ADI) server.
vdoSGAdiAliveReq	long	tmnxVdoSGAdiAliveReq	The value of tmnxVdoSGAdiAliveReq indicates the total number of alive messages received from the Ad Insert (ADI) server.
vdoSGAdiCueReq	long	tmnxVdoSGAdiCueReq	The value of tmnxVdoSGAdiCueReq indicates the total number of total number of cue requests sent to the Ad Insert (ADI) server.
vdoSGAdiInitReq	long	tmnxVdoSGAdiInitReq	The value of tmnxVdoSGAdiInitReq indicates the total number of init requests received from the Ad Insert (ADI) server.
vdoSGAdiServerAddr	String	tmnxVdoSGAdiServerAddr	The value of tmnxVdoSGAdiServerAddr indicates the address of Ad Insert (ADI) server on this channel.
vdoSGAdiServerAddrType	int	tmnxVdoSGAdiServerAddrType	The value of tmnxVdoSGAdiServerAddrType indicates the type of Ad Insert (ADI) server address represented by tmnxVdoSGAdiServerAddr.
vdoSGAdiServerUptime	long	tmnxVdoSGAdiServerUptime	The value of tmnxVdoSGAdiServerUptime indicates the time in seconds since the connection with Ad Insert (ADI) server was established.
vdoSGAdiSpliceReq	long	tmnxVdoSGAdiSpliceReq	The value of tmnxVdoSGAdiSpliceReq indicates the total number of splice requests received from the Ad Insert (ADI) server.
vdoSGAdiSucAbortResp	long	tmnxVdoSGAdiSucAbortResp	The value of tmnxVdoSGAdiSucAbortResp indicates the total number of successful abort responses sent to the Ad Insert (ADI) server.
vdoSGAdiSucAliveResp	long	tmnxVdoSGAdiSucAliveResp	The value of tmnxVdoSGAdiSucAliveResp indicates the total number of successful alive messages sent to the Ad Insert (ADI) server.

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5620 SAM counter name	Type	MIB counter name	Description
vdoSGAdiSucCueResp	long	tmnxVdoSGAdiSucCueResp	The value of tmnxVdoSGAdiSucCueResp indicates the total number of successful cue responses received from the Ad Insert (ADI) server.
vdoSGAdiSucInitResp	long	tmnxVdoSGAdiSucInitResp	The value of tmnxVdoSGAdiSucInitResp indicates the total number of successful init responses sent to the Ad Insert (ADI) server.
vdoSGAdiSucSpliceInCompResp	long	tmnxVdoSGAdiSucSpliceInCompResp	The value of tmnxVdoSGAdiSucSpliceInCompResp indicates the total number of successful splice-in complete responses sent to the Ad Insert (ADI) server.
vdoSGAdiSucSpliceOutCompResp	long	tmnxVdoSGAdiSucSpliceOutCompResp	The value of tmnxVdoSGAdiSucSpliceOutCompResp indicates the total number of successful splice-out complete responses sent to the Ad Insert (ADI) server.
vdoSGAdiSucSpliceResp	long	tmnxVdoSGAdiSucSpliceResp	The value of tmnxVdoSGAdiSucSpliceResp indicates the total number of successful splice responses sent to the Ad Insert (ADI) server.
vdoSGAdiUnknownSCTE30Req	long	tmnxVdoSGAdiUnknownSCTE30Req	The value of tmnxVdoSGAdiUnknownSCTE30Req indicates the total number of invalid Society of Cable Telecommunications Engineers 30 (SCTE-30) requests received from the Ad Insert (ADI) server.
vdoSGAdiUnsucAbortResp	long	tmnxVdoSGAdiUnsucAbortResp	The value of tmnxVdoSGAdiUnsucAbortResp indicates the total number of unsuccessful abort responses sent to the Ad Insert (ADI) server.
vdoSGAdiUnSucAliveResp	long	tmnxVdoSGAdiUnSucAliveResp	The value of tmnxVdoSGAdiUnSucAliveResp indicates the total number of unsuccessful alive messages sent to the Ad Insert (ADI) server.
vdoSGAdiUnsucCueResp	long	tmnxVdoSGAdiUnsucCueResp	The value of tmnxVdoSGAdiUnsucCueResp indicates the total number of unsuccessful cue responses received from the Ad Insert (ADI) server.
vdoSGAdiUnsucInitResp	long	tmnxVdoSGAdiUnsucInitResp	The value of tmnxVdoSGAdiUnsucInitResp indicates the total number of unsuccessful init responses sent to the Ad Insert (ADI) server.
vdoSGAdiUnsucSpliceOutComRes	long	tmnxVdoSGAdiUnsucSpliceOutComRes	The value of tmnxVdoSGAdiUnsucSpliceOutComRes indicates the total number of unsuccessful splice-out complete responses sent to the Ad Insert (ADI) server.

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5620 SAM counter name	Type	MIB counter name	Description
vdoSGAdiUnsucSpliceResp	long	tmnxVdoSGAdiUnsucSpliceResp	The value of tmnxVdoSGAdiUnsucSpliceResp indicates the total number of unsuccessful splice responses sent to the Ad Insert (ADI) server.
VdoGrpSrcSpliceStats MIB table name: TIMETRA-VIDEO-MIB.tmnxVdoSGSpliceStatusTable Monitored class: service.ZoneAdiChl			
vdoSGSpliceAbortReason	long	tmnxVdoSGSpliceAbortReason	The value of tmnxVdoSGSpliceAbortReason indicates the reason if a splice operation has been aborted. If the value of this object is equal to 'none', then the splice has not been aborted.
vdoSGSpliceAdServerAddr	String	tmnxVdoSGSpliceAdServerAddr	The value of tmnxVdoSGSpliceAdServerAddr indicates the address of the Ad Insert (ADI) server that issued the splice request.
vdoSGSpliceAdServerAddrType	int	tmnxVdoSGSpliceAdServerAddrType	The value of tmnxVdoSGSpliceAdServerAddrType indicates the type of Ad Insert (ADI) server address represented by tmnxVdoSGSpliceAdServerAddr.
vdoSGSpliceBlkFramePTS	String	tmnxVdoSGSpliceBlkFramePTS	The value of tmnxVdoSGSpliceBlkFramePTS indicates the Presentation Timestamp (PTS) of the first black frame.
vdoSGSpliceDurationPlayed	long	tmnxVdoSGSpliceDurationPlayed	The value of tmnxVdoSGSpliceDurationPlayed indicates the splice duration, in seconds, played by the splicer.
vdoSGSpliceDurationReq	long	tmnxVdoSGSpliceDurationReq	The value of tmnxVdoSGSpliceDurationReq indicates the splice duration, in seconds, of the ad requested by the Ad Insert (ADI) server.
vdoSGSpliceMaxAdPTS	String	tmnxVdoSGSpliceMaxAdPTS	The value of tmnxVdoSGSpliceMaxAdPTS indicates the maximum Presentation Timestamp (PTS) value of the last Group of Pictures (GOP) of ad stream (non-black frame).
vdoSGSpliceMinNwPTS	String	tmnxVdoSGSpliceMinNwPTS	The value of tmnxVdoSGSpliceMinNwPTS indicates the minimum Presentation Timestamp (PTS) value from the first Group of Pictures (GOP) of the network stream after the splice out has occured.
vdoSGSpliceNumBlkFrames	long	tmnxVdoSGSpliceNumBlkFrames	The value of tmnxVdoSGSpliceNumBlkFrames indicates the number of black frames inserted.
vdoSGSplicePriorSessionId	long	tmnxVdoSGSplicePriorSessionId	The value of tmnxVdoSGSplicePriorSessionId indicates the prior session id of the ad. If the value of this object is not equal to 0xFFFFFFFF, then this splice is a back-to-back ad insertion.

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5620 SAM counter name	Type	MIB counter name	Description
vdoSGSpliceRate	long	tmnxVdoSGSpliceRate	The value of tmnxVdoSGSpliceRate indicates the rate of the ad stream, in kilo-bits per second (kbps), received by the splicer.
vdoSGSpliceSessionId	long	tmnxVdoSGSpliceSessionId	The value of tmnxVdoSGSpliceSessionId indicates the session ID of the ad request.
vdoSGSpliceSpliceInSeqNum	long	tmnxVdoSGSpliceSpliceInSeqNum	The value of tmnxVdoSGSpliceSpliceInSeqNum indicates the sequence number at which the splice-in to the ad occurred.
vdoSGSpliceSpliceOutSeqNum	long	tmnxVdoSGSpliceSpliceOutSeqNum	The value of tmnxVdoSGSpliceSpliceOutSeqNum indicates the sequence number at which the splice-out to the ad occurred.
vdoSGSpliceStartTime	long	tmnxVdoSGSpliceStartTime	The value of tmnxVdoSGSpliceStartTime indicates the start time of splice in seconds.
vdoSGSpliceStatus	long	tmnxVdoSGSpliceStatus	The value of tmnxVdoSGSpliceStatus indicates the status of this splice request.
VdoGrpSrcStats MIB table name: TIMETRA-VIDEO-MIB.tmnxVdoGrpSrcStatTable Monitored classes: • service.AdiChl • service.ZoneAdiChl			
vdoGrpSrcADIAdminState	int	tmnxVdoGrpSrcADIAdminState	The value of tmnxVdoGrpSrcADIAdminState indicates whether Ad Insertion is enabled on the video ISA.
vdoGrpSrcADICurrentState	long	tmnxVdoGrpSrcADICurrentState	The value of tmnxVdoGrpSrcADICurrentState indicates whether the video ISA is transmitting network stream or ads.
vdoGrpSrcADIPATChanges	long	tmnxVdoGrpSrcADIPATChanges	The value of tmnxVdoGrpSrcADIPATChanges indicates the total number of Program Association Table (PAT) version changes.
vdoGrpSrcADIPATVersion	long	tmnxVdoGrpSrcADIPATVersion	The value of tmnxVdoGrpSrcADIPATVersion indicates the version of the Program Association Table (PAT).
vdoGrpSrcADIPMTChanges	long	tmnxVdoGrpSrcADIPMTChanges	The value of tmnxVdoGrpSrcADIPMTChanges indicates the total number of Program Map Table (PMT) version changes.
vdoGrpSrcADIPMTVersion	long	tmnxVdoGrpSrcADIPMTVersion	The value of tmnxVdoGrpSrcADIPMTVersion indicates the version of the Program Map Table (PMT).
vdoGrpSrcADIRxPackets	UINT128	tmnxVdoGrpSrcADIRxPackets	The value of tmnxVdoGrpSrcADIRxPackets indicates the total number of Ad Insert (ADI) packets received by the video ISA.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpSrcADIRxSCTE35MsgDisc	long	tmnxVdoGrpSrcADIRxSCTE35MsgDisc	The value of tmnxVdoGrpSrcADIRxSCTE35MsgDisc indicates the total number of Society of Cable Telecommunications Engineers (SCTE-35) messages received by the video ISA and discarded. SCTE-35 messages with unsupported commands and encrypted SCTE-35 messages are discarded.
vdoGrpSrcADIRxSCTE35MsgEnc	long	tmnxVdoGrpSrcADIRxSCTE35MsgEnc	The value of tmnxVdoGrpSrcADIRxSCTE35MsgEnc indicates the total number of encrypted Society of Cable Telecommunications Engineers (SCTE-35) messages received by the video ISA.
vdoGrpSrcADIRxSCTE35Msgs	long	tmnxVdoGrpSrcADIRxSCTE35Msgs	The value of tmnxVdoGrpSrcADIRxSCTE35Msgs indicates the total number of Society of Cable Telecommunications Engineers (SCTE-35) messages received by the video ISA.
vdoGrpSrcADIRxSCTE35MsgUnsup	long	tmnxVdoGrpSrcADIRxSCTE35MsgUnsup	The value of tmnxVdoGrpSrcADIRxSCTE35MsgUnsup indicates the total number of unsupported Society of Cable Telecommunications Engineers (SCTE-35) messages received by the video ISA.
vdoGrpSrcADITxPackets	UINT128	tmnxVdoGrpSrcADITxPackets	The value of tmnxVdoGrpSrcADITxPackets indicates the total number of Ad Insert (ADI) packets sent by the video ISA.
vdoGrpSrcADIUnsuppTSLenPkts	long	tmnxVdoGrpSrcADIUnsuppTSLenPkts	The value of tmnxVdoGrpSrcADIUnsuppTSLenPkts indicates the total number of data packets received whose size is not equal to 188 bytes. The value of this object is valid only when the corresponding tmnxVdoGrpADIServerState value is set to 'true'.
vdoGrpSrcAdminBW	long	tmnxVdoGrpSrcAdminBW	The value of tmnxVdoGrpSrcAdminBW indicates the administrative bandwidth of the multicast group.
vdoGrpSrcAdminRTBufferSize	long	tmnxVdoGrpSrcAdminRTBufferSize	The value of tmnxVdoGrpSrcAdminRTBufferSize indicates the number of milliseconds worth of channel packets to store for the Retransmission (RT) server.
vdoGrpSrcBufferSize	long	tmnxVdoGrpSrcBufferSize	The value of tmnxVdoGrpSrcBufferSize indicates the number of milliseconds worth of channel packets stored by the Retransmission (RT) server or Fast Channel Change (FCC) server on this channel.
vdoGrpSrcDupSeqNumber	long	tmnxVdoGrpSrcDupSeqNumber	The value of tmnxVdoGrpSrcDupSeqNumber indicates the total number of Real-time Transport Protocol (RTP) packets detected with a duplicate sequence number.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpSrcFCCSrvrAdminState	int	tmnxVdoGrpSrcFCCSrvrAdminState	The value of tmnxVdoGrpSrcFCCSrvrAdminState indicates whether the Fast Channel Change (FCC) server is enabled on this channel.
vdoGrpSrcFCCSrvrChnlType	int	tmnxVdoGrpSrcFCCSrvrChnlType	The value of tmnxVdoGrpSrcFCCSrvrChnlType indicates the type of channel served by the Fast Channel Change (FCC) server.
vdoGrpSrcFCCSrvrRxFailedReq	long	tmnxVdoGrpSrcFCCSrvrRxFailedReq	The value of tmnxVdoGrpSrcFCCSrvrRxFailedReq indicates the total number of failed requests at the Fast Channel Change (FCC) server.
vdoGrpSrcFCCSrvrRxFCCReq	long	tmnxVdoGrpSrcFCCSrvrRxFCCReq	The value of tmnxVdoGrpSrcFCCSrvrRxFCCReq indicates the total number of Fast Channel Change (FCC) requests received by the FCC server.
vdoGrpSrcFCCSrvrTxBytes	UINT128	tmnxVdoGrpSrcFCCSrvrTxBytes	The value of tmnxVdoGrpSrcFCCSrvrTxBytes indicates the total number of bytes sent by the Fast Channel Change (FCC) server.
vdoGrpSrcFCCSrvrTxFCCReplies	long	tmnxVdoGrpSrcFCCSrvrTxFCCReplies	The value of tmnxVdoGrpSrcFCCSrvrTxFCCReplies indicates the total number of Fast Channel Change (FCC) replies sent by the FCC server.
vdoGrpSrcFCCSrvrTxPackets	UINT128	tmnxVdoGrpSrcFCCSrvrTxPackets	The value of tmnxVdoGrpSrcFCCSrvrTxPackets indicates the total number of packets sent by the Fast Channel Change (FCC) server.
vdoGrpSrcGroupAddress	String	tmnxVdoGrpSrcGroupAddress	The value of tmnxVdoGrpSrcGroupAddress indicates the IP multicast group address for which this entry contains information.
vdoGrpSrcGrpAddrType	int	tmnxVdoGrpSrcGrpAddrType	The value of tmnxVdoGrpSrcGrpAddrType indicates the type of IP multicast group address represented by tmnxVdoGrpSrcGroupAddress.
vdoGrpSrcRTClientAdminState	int	tmnxVdoGrpSrcRTClientAdminState	The value of tmnxVdoGrpSrcRTClientAdminState indicates the administrative state of the retransmission client.
vdoGrpSrcRTClientFailedReq	long	tmnxVdoGrpSrcRTClientFailedReq	The value of tmnxVdoGrpSrcRTClientFailedReq indicates the total number of Retransmission (RT) requests that could not be generated by the RT client due to gaps in the sequence numbers.
vdoGrpSrcRTClientGapsDetectd	long	tmnxVdoGrpSrcRTClientGapsDetectd	The value of tmnxVdoGrpSrcRTClientGapsDetectd indicates the total number of gaps in the sequence numbers detected by the Retransmission (RT) client.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpSrcRTClientRTSrvrPort	long	tmnxVdoGrpSrcRTClientRTSrvrPort	The value of tmnxVdoGrpSrcRTClientRTSrvrPort indicates the Retransmission (RT) server port for this channel.
vdoGrpSrcRTClientRxReTxBytes	UINT128	tmnxVdoGrpSrcRTClientRxReTxBytes	The value of tmnxVdoGrpSrcRTClientRxReTxBytes indicates the total number of retransmitted bytes received by the Retransmission (RT) client.
vdoGrpSrcRTClientRxReTxPkts	UINT128	tmnxVdoGrpSrcRTClientRxReTxPkts	The value of tmnxVdoGrpSrcRTClientRxReTxPkts indicates the total number of retransmitted packets received by the Retransmission (RT) client.
vdoGrpSrcRTClientTxRTReq	long	tmnxVdoGrpSrcRTClientTxRTReq	The value of tmnxVdoGrpSrcRTClientTxRTReq indicates the total number of Retransmission (RT) requests sent by the RT client.
vdoGrpSrcRTClientTxRTReqReTx	long	tmnxVdoGrpSrcRTClientTxRTReqReTx	The value of tmnxVdoGrpSrcRTClientTxRTReqReTx indicates the total number of repeat Retransmission (RT) requests attempted by the RT client.
vdoGrpSrcRTClntRTSvrAddr	String	tmnxVdoGrpSrcRTClntRTSvrAddr	The value of tmnxVdoGrpSrcRTClntRTSvrAddr indicates the address of the Retransmission (RT) server for this channel.
vdoGrpSrcRTClntRTSvrAddrType	int	tmnxVdoGrpSrcRTClntRTSvrAddrType	The value of tmnxVdoGrpSrcRTClntRTSvrAddrType indicates the type of address represented by tmnxVdoGrpSrcRTClntRTSvrAddr.
vdoGrpSrcRTSrvrAdminState	int	tmnxVdoGrpSrcRTSrvrAdminState	The value of tmnxVdoGrpSrcRTSrvrAdminState indicates the administrative state of the Retransmission (RT) server.
vdoGrpSrcRTSrvrRtpPktsReq	long	tmnxVdoGrpSrcRTSrvrRtpPktsReq	The value of tmnxVdoGrpSrcRTSrvrRtpPktsReq indicates the totoal number of Real-time Transport Protocol (RTP) packets requested in the Real-time Transport Control Protocol (RTCP) feedback (FB) messages received on this channel.
vdoGrpSrcRTSrvrRxFailedReq	long	tmnxVdoGrpSrcRTSrvrRxFailedReq	The value of tmnxVdoGrpSrcRTSrvrRxFailedReq indicates the total number of failed requests at the Retransmission (RT) server due to congestion or lack of resources.
vdoGrpSrcRTSrvrRxRTReq	long	tmnxVdoGrpSrcRTSrvrRxRTReq	The value of tmnxVdoGrpSrcRTSrvrRxRTReq indicates the total number of RT requests received by the Retransmission (RT) server.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpSrcRTSrvrTxBytes	UINT128	tmnxVdoGrpSrcRTSrvrTxBytes	The value of tmnxVdoGrpSrcRTSrvrTxBytes indicates the total number of bytes sent by the Retransmission (RT) server.
vdoGrpSrcRTSrvrTxPackets	UINT128	tmnxVdoGrpSrcRTSrvrTxPackets	The value of tmnxVdoGrpSrcRTSrvrTxPackets indicates the total number of packets sent by the Retransmission (RT) server.
vdoGrpSrcRTSrvrTxRTReplies	long	tmnxVdoGrpSrcRTSrvrTxRTReplies	The value of tmnxVdoGrpSrcRTSrvrTxRTReplies indicates the total number of Retransmission (RT) replies sent by the RT server.
vdoGrpSrcRxBytes	UINT128	tmnxVdoGrpSrcRxBytes	The value of tmnxVdoGrpSrcRxBytes indicates the total number of bytes received on this multicast channel.
vdoGrpSrcRxInvalidPackets	UINT128	tmnxVdoGrpSrcRxInvalidPackets	The value of tmnxVdoGrpSrcRxInvalidPackets indicates the total number of invalid packets received on this multicast channel.
vdoGrpSrcRxPackets	UINT128	tmnxVdoGrpSrcRxPackets	The value of tmnxVdoGrpSrcRxPackets indicates the total number of packets received on this multicast channel.
vdoGrpSrcSourceAddress	String	tmnxVdoGrpSrcSourceAddress	The value of tmnxVdoGrpSrcSourceAddress indicates the IP multicast source address for which this entry contains information.
vdoGrpSrcSrcAddrType	int	tmnxVdoGrpSrcSrcAddrType	The value of tmnxVdoGrpSrcSrcAddrType indicates the type of IP multicast source address represented by tmnxVdoGrpSrcSourceAddress.
vdoGrpSrcSSRCId	long	tmnxVdoGrpSrcSSRCId	The value of tmnxVdoGrpSrcSSRCId indicates the synchronization source (SSRC) identifier carried in the Real-time Transport Protocol (RTP) header to identify the source of a stream of RTP packets.
vdoGrpSrcStreamType	long	tmnxVdoGrpSrcStreamType	The value of tmnxVdoGrpSrcStreamType indicates the type of stream being transmitted from the video ISA perspective. Network stream is the stream ingressing the video ISA and being stored by it. Zone stream is the stream egressing the video ISA into which AD streams will be inserted.
vdoGrpSrcTxBytes	UINT128	tmnxVdoGrpSrcTxBytes	The value of tmnxVdoGrpSrcTxBytes indicates the total number of bytes transmitted on this multicast channel.
vdoGrpSrcTxFailedPackets	UINT128	tmnxVdoGrpSrcTxFailedPackets	The value of tmnxVdoGrpSrcTxFailedPackets indicates the total number of failures during the transmission of packets on this multicast channel. Failure happens when the packet to be sent is not stored in the video cache.

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5620 SAM counter name	Type	MIB counter name	Description
vdoGrpSrcTxPackets	UINT128	tmnxVdoGrpSrcTxPackets	The value of tmnxVdoGrpSrcTxPackets indicates the total number of packets transmitted on this multicast channel.
vdoGrpSrcUDPDestPort	long	tmnxVdoGrpSrcUDPDestPort	The value of tmnxVdoGrpSrcUDPDestPort indicates the UDP destination port in the received RTP multicast stream.
vdoGrpSrcUDPSrcPort	long	tmnxVdoGrpSrcUDPSrcPort	The value of tmnxVdoGrpSrcUDPSrcPort indicates the UDP source port in the received RTP multicast stream.
vdoGrpSrcUptime	long	tmnxVdoGrpSrcUptime	The value of tmnxVdoGrpSrcUptime indicates the time since this source group entry was created.
vdoGrpSrcVdoGrpId	long	tmnxVdoGrpSrcVdoGrpId	The value of tmnxVdoGrpSrcVdoGrpId indicates the identifier of the video group.
VdoIfStats MIB table name: TIMETRA-VIDEO-MIB.tmnxVdoIfStatTable Monitored class: service.VideoIfIpAddress			
vdoIfScte30InitSessions	long	tmnxVdoIfScte30InitSessions	The value of tmnxVdoIfScte30InitSessions indicates the total number of scte30 init sessions with the Ad Insert (ADI) servers for this interface.
vdoIfScte30TcpSessions	long	tmnxVdoIfScte30TcpSessions	The value of tmnxVdoIfScte30TcpSessions indicates the total number of scte30 tcp sessions with the Ad Insert (ADI) servers for this interface.
vdoIfStatFCCSrRxHdFailedReq	UINT128	tmnxVdoIfStatFCCSrRxHdFailedReq	The value of tmnxVdoIfStatFCCSrRxHdFailedReq indicates the total number of failed Fast Channel Change (FCC) requests received from High Definition (HD) channels on this interface.
vdoIfStatFCCSrRxHdFCCReq	UINT128	tmnxVdoIfStatFCCSrRxHdFCCReq	The value of tmnxVdoIfStatFCCSrRxHdFCCReq indicates the total number of Fast Channel Change (FCC) requests received from High Definition (HD) channels on this interface.
vdoIfStatFCCSrRxPipFailedReq	UINT128	tmnxVdoIfStatFCCSrRxPipFailedReq	The value of tmnxVdoIfStatFCCSrRxPipFailedReq indicates the total number of failed Fast Channel Change (FCC) requests received from Picture-In-Picture (PIP) channels on this interface.
vdoIfStatFCCSrRxPipFCCReq	UINT128	tmnxVdoIfStatFCCSrRxPipFCCReq	The value of tmnxVdoIfStatFCCSrRxPipFCCReq indicates the total number of Fast Channel Change (FCC) requests received from Picture-In-Picture (PIP) channels on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
vdoIfStatFCCSrRxSdFailedReq	UINT128	tmnxVdoIfStatFCCSrRxSdFailedReq	The value of tmnxVdoIfStatFCCSrRxSdFailedReq indicates the total number of failed Fast Channel Change (FCC) requests received from Standard Definition (SD) channels on this interface.
vdoIfStatFCCSrRxSdFCCReq	UINT128	tmnxVdoIfStatFCCSrRxSdFCCReq	The value of tmnxVdoIfStatFCCSrRxSdFCCReq indicates the total number of Fast Channel Change (FCC) requests received from Standard Definition (SD) channels on this interface.
vdoIfStatFCCSrTxHdBytes	UINT128	tmnxVdoIfStatFCCSrTxHdBytes	The value of tmnxVdoIfStatFCCSrTxHdBytes indicates the total number of High Definition (HD) channel bytes sent from this interface.
vdoIfStatFCCSrTxHdFCCReplies	UINT128	tmnxVdoIfStatFCCSrTxHdFCCReplies	The value of tmnxVdoIfStatFCCSrTxHdFCCReplies indicates the total number of High Definition (HD) channel Fast Channel Change (FCC) replies sent from this interface.
vdoIfStatFCCSrTxHdPackets	UINT128	tmnxVdoIfStatFCCSrTxHdPackets	The value of tmnxVdoIfStatFCCSrTxHdPackets indicates the total number of High Definition (HD) channel packets sent from this interface.
vdoIfStatFCCSrTxPipBytes	UINT128	tmnxVdoIfStatFCCSrTxPipBytes	The value of tmnxVdoIfStatFCCSrTxPipBytes indicates the total number of Picture-In-Picture (PIP) channel bytes sent from this interface.
vdoIfStatFCCSrTxPipFCCRplies	UINT128	tmnxVdoIfStatFCCSrTxPipFCCRplies	The value of tmnxVdoIfStatFCCSrTxPipFCCRplies indicates the total number of Picture-In-Picture (PIP) channel Fast Channel Change (FCC) replies sent from this interface.
vdoIfStatFCCSrTxPipPackets	UINT128	tmnxVdoIfStatFCCSrTxPipPackets	The value of tmnxVdoIfStatFCCSrTxPipPackets indicates the total number of Picture-In-Picture (PIP) channel packets sent from this interface.
vdoIfStatFCCSrTxSdBytes	UINT128	tmnxVdoIfStatFCCSrTxSdBytes	The value of tmnxVdoIfStatFCCSrTxSdBytes indicates the total number of Standard Definition (SD) channel bytes sent from this interface.
vdoIfStatFCCSrTxSdFCCReplies	UINT128	tmnxVdoIfStatFCCSrTxSdFCCReplies	The value of tmnxVdoIfStatFCCSrTxSdFCCReplies indicates the total number of Standard Definition (SD) channel Fast Channel Change (FCC) replies sent from this interface.

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5620 SAM counter name	Type	MIB counter name	Description
vdoIfStatFCCSrTxSdPackets	UINT128	tmnxVdoIfStatFCCSrTxSdPackets	The value of tmnxVdoIfStatFCCSrTxSdPackets indicates the total number of Standard Definition (SD) channel packets sent from this interface.
vdoIfStatHdFCCServerMode	int	tmnxVdoIfStatHdFCCServerMode	The value of tmnxVdoIfStatHdFCCServerMode indicates the mode of the High Definition (HD) Fast Channel Change (FCC) server on this interface.
vdoIfStatHdRTServerState	boolean	tmnxVdoIfStatHdRTServerState	The value of tmnxVdoIfStatHdRTServerState indicates whether the High Definition (HD) retransmission server is enabled on this interface.
vdoIfStatPipFCCServerMode	int	tmnxVdoIfStatPipFCCServerMode	The value of tmnxVdoIfStatPipFCCServerMode indicates the mode of the Picture-in-Picture (PIP) Fast Channel Change (FCC) server on this interface.
vdoIfStatPipRTServerState	boolean	tmnxVdoIfStatPipRTServerState	The value of tmnxVdoIfStatPipRTServerState indicates whether the Picture-in-Picture (PIP) retransmission server is enabled on this interface.
vdoIfStatRTSvrHdRtpPktsReq	UINT128	tmnxVdoIfStatRTSvrHdRtpPktsReq	The value of tmnxVdoIfStatRTSvrHdRtpPktsReq indicates the total number of High Definition (HD) channel Real-time Transport Protocol (RTP) packets requested in the Real-time Transport Control Protocol (RTCP) feedback (FB) messages received on this interface.
vdoIfStatRTSvrPipRtpPktsReq	UINT128	tmnxVdoIfStatRTSvrPipRtpPktsReq	The value of tmnxVdoIfStatRTSvrPipRtpPktsReq indicates the total number of Picture-In-Picture (PIP) channel Real-time Transport Protocol (RTP) packets requested in the Real-time Transport Control Protocol (RTCP) feedback (FB) messages received on this interface.
vdoIfStatRTSvrRxHdFailedReq	UINT128	tmnxVdoIfStatRTSvrRxHdFailedReq	The value of tmnxVdoIfStatRTSvrRxHdFailedReq indicates the total number of failed Retransmission (RT) requests received from High Definition (HD) channels on this interface.
vdoIfStatRTSvrRxHdRTReq	UINT128	tmnxVdoIfStatRTSvrRxHdRTReq	The value of tmnxVdoIfStatRTSvrRxHdRTReq indicates the total number of Retransmission (RT) requests received from High Definition (HD) channels on this interface.
vdoIfStatRTSvrRxPipFailedReq	UINT128	tmnxVdoIfStatRTSvrRxPipFailedReq	The value of tmnxVdoIfStatRTSvrRxPipFailedReq indicates the total number of failed Retransmission (RT) requests received from Picture-In-Picture (PIP) channels on this interface.

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5620 SAM counter name	Type	MIB counter name	Description
vdoIfStatRTSvrRxPipRTReq	UINT128	tmnxVdoIfStatRTSvrRxPipRTReq	The value of tmnxVdoIfStatRTSvrRxPipRTReq indicates the total number of Retransmission (RT) requests received from Picture-In-Picture (PIP) channels on this interface.
vdoIfStatRTSvrRxSdFailedReq	UINT128	tmnxVdoIfStatRTSvrRxSdFailedReq	The value of tmnxVdoIfStatRTSvrRxSdFailedReq indicates the total number of failed Retransmission (RT) requests received from Standard Definition (SD) channels on this interface.
vdoIfStatRTSvrRxSdRTReq	UINT128	tmnxVdoIfStatRTSvrRxSdRTReq	The value of tmnxVdoIfStatRTSvrRxSdRTReq indicates the total number of Retransmission (RT) requests received from Standard Definition (SD) channels on this interface.
vdoIfStatRTSvrSdRtpPktsReq	UINT128	tmnxVdoIfStatRTSvrSdRtpPktsReq	The value of tmnxVdoIfStatRTSvrSdRtpPktsReq indicates the total number of Standard Definition (SD) channel Real-time Transport Protocol (RTP) packets requested in the Real-time Transport Control Protocol (RTCP) feedback (FB) messages received on this interface.
vdoIfStatRTSvrTxHdBytes	UINT128	tmnxVdoIfStatRTSvrTxHdBytes	The value of tmnxVdoIfStatRTSvrTxHdBytes indicates the total number of High Definition (HD) channel bytes sent from this interface.
vdoIfStatRTSvrTxHdPackets	UINT128	tmnxVdoIfStatRTSvrTxHdPackets	The value of tmnxVdoIfStatRTSvrTxHdPackets indicates the total number of High Definition (HD) channel packets sent from this interface.
vdoIfStatRTSvrTxHdRTReplies	UINT128	tmnxVdoIfStatRTSvrTxHdRTReplies	The value of tmnxVdoIfStatRTSvrTxHdRTReplies indicates the total number of High Definition (HD) channel Retransmission (RT) replies sent from this interface.
vdoIfStatRTSvrTxPipBytes	UINT128	tmnxVdoIfStatRTSvrTxPipBytes	The value of tmnxVdoIfStatRTSvrTxPipBytes indicates the total number of Picture-In-Picture (PIP) channel bytes sent from this interface.
vdoIfStatRTSvrTxPipPackets	UINT128	tmnxVdoIfStatRTSvrTxPipPackets	The value of tmnxVdoIfStatRTSvrTxPipPackets indicates the total number of Picture-In-Picture (PIP) channel packets sent from this interface.
vdoIfStatRTSvrTxPipRTReplies	UINT128	tmnxVdoIfStatRTSvrTxPipRTReplies	The value of tmnxVdoIfStatRTSvrTxPipRTReplies indicates the total number of Picture-In-Picture (PIP) channel Retransmission (RT) replies sent from this interface.

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5620 SAM counter name	Type	MIB counter name	Description
vdoIfStatRTSvrTxSdBytes	UINT128	tmnxVdoIfStatRTSvrTxSdBytes	The value of tmnxVdoIfStatRTSvrTxSdBytes indicates the total number of Standard Definition (SD) channel bytes sent from this interface.
vdoIfStatRTSvrTxSdPackets	UINT128	tmnxVdoIfStatRTSvrTxSdPackets	The value of tmnxVdoIfStatRTSvrTxSdPackets indicates the total number of Standard Definition (SD) channel packets sent from this interface.
vdoIfStatRTSvrTxSdRTReplies	UINT128	tmnxVdoIfStatRTSvrTxSdRTReplies	The value of tmnxVdoIfStatRTSvrTxSdRTReplies indicates the total number of Standard Definition (SD) channel Retransmission (RT) replies sent from this interface.
vdoIfStatSdFCCServerMode	int	tmnxVdoIfStatSdFCCServerMode	The value of tmnxVdoIfStatSdFCCServerMode indicates the mode of the Standard Definition (SD) Fast Channel Change (FCC) server on this interface.
vdoIfStatSdRTServerState	boolean	tmnxVdoIfStatSdRTServerState	The value of tmnxVdoIfStatSdRTServerState indicates whether the Standard Definition (SD) retransmission server is enabled on this interface.
vdoIfStatTxFailedPackets	UINT128	tmnxVdoIfStatTxFailedPackets	The value of tmnxVdoIfStatTxFailedPackets indicates the total number of failures during the transmission of packets from this video interface. Failure happens when the packet to be sent is not stored in the video cache.

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Table I-37 sitesec statistics

5620 SAM counter name	Type	MIB counter name	Description
CpmFilterQueueStats MIB table name: TIMETRA-SECURITY-MIB.tCpmFilterQueueStatsTable Monitored class: sitesec.CpmFilterQueue			
droppedInOctets	UINT128	tCpmFilterQInProfileDropOctets	The value of tCpmFilterQInProfileDropOctets indicates the number of octets complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedInPackets	UINT128	tCpmFilterQInProfileDropPkts	The value of tCpmFilterQInProfileDropPkts indicates the number of packets complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.

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5620 SAM counter name	Type	MIB counter name	Description
droppedOutOctets	UINT128	tCpmFilterQOutProfileDropOctets	The value of tCpmFilterQOutProfileDropOctets indicates the number of octets not complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
droppedOutPackets	UINT128	tCpmFilterQOutProfileDropPkts	The value of tCpmFilterQOutProfileDropPkts indicates the number of packets not complying to the queue Qos profile dropped from the tCpmFilterQueueEntry with the same index.
forwardedInOctets	UINT128	tCpmFilterQInProfileFwdOctets	The value of tCpmFilterQInProfileFwdOctets indicates the number of octets complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedInPackets	UINT128	tCpmFilterQInProfileFwdPkts	The value of tCpmFilterQInProfileFwdPkts indicates the number of packets complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedOutOctets	UINT128	tCpmFilterQOutProfileFwdOctets	The value of tCpmFilterQOutProfileFwdOctets indicates the number of octets not complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
forwardedOutPackets	UINT128	tCpmFilterQOutProfileFwdPkts	The value of tCpmFilterQOutProfileFwdPkts indicates the number of packets not complying to the queue Qos profile forwarded from the tCpmFilterQueueEntry with the same index.
CpmIpFilterStats MIB table name: TIMETRA-SECURITY-MIB.tCpmIpFilterStatsTable Monitored class: sitesec.CpmIpFilterEntry			
droppedPackets	UINT128	tCpmIpFilterStatsDroppedPkts	The value of tCpmIpFilterStatsDroppedPkts indicates the number of packets dropped due to the tCpmIpFilterEntry with the same index.
forwardedPackets	UINT128	tCpmIpFilterStatsForwardedPkts	The value of tCpmIpFilterStatsForwardedPkts indicates the number of packets forwarded due to the tCpmIpFilterEntry with the same index.
CpmIPv6FilterStats MIB table name: TIMETRA-SECURITY-MIB.tCpmIPv6FilterStatsTable Monitored class: sitesec.CpmIPv6FilterEntry			

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5620 SAM counter name	Type	MIB counter name	Description
droppedPackets	UINT128	tCpmIPv6FilterStatsDroppedPkts	The value of tCpmIPv6FilterStatsDroppedPkts indicates the number of packets dropped due to the tCpmIPv6FilterEntry with the same index.
forwardedPackets	UINT128	tCpmIPv6FilterStatsForwardedPkts	The value of tCpmIPv6FilterStatsForwardedPkts indicates the number of packets forwarded due to the tCpmIPv6FilterEntry with the same index.
CpmMacFilterStats MIB table name: TIMETRA-SECURITY-MIB.tCpmMacFilterStatsTable Monitored class: sitesec.CpmMacFilterEntry			
droppedPackets	UINT128	tCpmMacFilterStatsDroppedPkts	The value of tCpmMacFilterStatsDroppedPkts indicates the number of packets dropped due to the tCpmMacFilterEntry with the same index.
forwardedPackets	UINT128	tCpmMacFilterStatsForwardedPkts	The value of tCpmMacFilterStatsForwardedPkts indicates the number of packets forwarded due to the tCpmMacFilterEntry with the same index.
MafEntryStats MIB table name: TIMETRA-SECURITY-MIB.tmnxIPMafMatchTable Monitored class: sitesec.MafEntry			
matchCount	UINT128	tmnxIPMafMatchCount	The value of tmnxIPMafMatchCount indicates the number of times a management packet has matched this filter entry.

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Table I-38 sonetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
SonetFarEndLineCurrentStats MIB table name: SONET-MIB.sonetFarEndLineCurrentTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetFarEndLineCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
erroredSeconds	long	sonetFarEndLineCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
severelyErroredSeconds	long	sonetFarEndLineCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.

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5620 SAM counter name	Type	MIB counter name	Description
unavailableSeconds	long	sonetFarEndLineCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
SonetFarEndLineIntervalStats MIB table name: SONET-MIB.sonetFarEndLineIntervalTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetFarEndLineIntervalCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetFarEndLineIntervalESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetFarEndLineIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetFarEndLineIntervalSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetFarEndLineIntervalUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Line interface in a particular 15-minute interval in the past 24 hours.
SonetFarEndPathCurrentStats MIB table name: SONET-MIB.sonetFarEndPathCurrentTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
erroredSeconds	long	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.

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5620 SAM counter name	Type	MIB counter name	Description
severelyErroredSeconds	long	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
unavailableSeconds	long	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
SonetFarEndPathIntervalStats MIB table name: SONET-MIB.sonetFarEndPathIntervalTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetFarEndPathIntervalCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetFarEndPathIntervalESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetFarEndPathIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetFarEndPathIntervalSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetFarEndPathIntervalUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in a particular 15-minute interval in the past 24 hours.
SonetFarEndVtCurrentStats MIB table name: SONET-MIB.sonetFarEndVTCurrentTable Monitored class: sonetequipment.TributaryChannel			

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5620 SAM counter name	Type	MIB counter name	Description
codingViolations	long	sonetFarEndVTCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH VT interface in the current 15 minute interval.
erroredSeconds	long	sonetFarEndVTCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
severelyErroredSeconds	long	sonetFarEndVTCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH VT interface in the current 15 minute interval.
unavailableSeconds	long	sonetFarEndVTCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH VT interface in the current 15 minute interval.
SonetFarEndVtIntervalStats MIB table name: SONET-MIB.sonetFarEndVTIntervalTable Monitored class: sonetequipment.TributaryChannel			
codingViolations	long	sonetFarEndVTIntervalCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetFarEndVTIntervalESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetFarEndVTIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetFarEndVTIntervalSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetFarEndVTIntervalUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH VT interface in a particular 15-minute interval in the past 24 hours.
SonetLineCurrentStats MIB table name: SONET-MIB.sonetLineCurrentTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
codingViolations	long	sonetLineCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in the current 15 minute interval.
currentStatus	long	sonetLineCurrentStatus	This variable indicates the status of the interface. The sonetLineCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetLineNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetLineNoDefect 2 sonetLineAIS 4 sonetLineRDI.
erroredSeconds	long	sonetLineCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
severelyErroredSeconds	long	sonetLineCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
unavailableSeconds	long	sonetLineCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
SonetLineIntervalStats MIB table name: SONET-MIB.sonetLineIntervalTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetLineIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetLineIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetLineIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetLineIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetLineIntervalUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in a particular 15-minute interval in the past 24 hours.

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5620 SAM counter name	Type	MIB counter name	Description
SonetPathCurrentStats MIB table name: SONET-MIB.sonetPathCurrentTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			
codingViolations	long	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.
currentStatus	long	sonetPathCurrentStatus	This variable indicates the status of the interface. The sonetPathCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetPathNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetPathNoDefect 2 sonetPathSTSLOP 4 sonetPathSTSAIS 8 sonetPathSTSRDI 16 sonetPathUnequipped 32 sonetPathSignalLabelMismatch.
currentWidth	int	sonetPathCurrentWidth	A value that indicates the type of the SONET/SDH Path. For SONET, the assigned types are the STS-Nc SPEs, where N = 1, 3, 12, 24, 48, 192 and 768. STS-1 is equal to 51.84 Mbps. For SDH, the assigned types are the STM-Nc VCs, where N = 1, 4, 16, 64 and 256.
erroredSeconds	long	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
severelyErroredSeconds	long	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
unavailableSeconds	long	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.
SonetPathIntervalStats MIB table name: SONET-MIB.sonetPathIntervalTable Monitored classes: • sonetequipment.Sts1Channel • sonetequipment.Sts3Channel • sonetequipment.Sts12Channel • sonetequipment.Sts48Channel • sonetequipment.Sts192Channel • sonetequipment.Tu3Channel			

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5620 SAM counter name	Type	MIB counter name	Description
codingViolations	long	sonetPathIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetPathIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetPathIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetPathIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetPathIntervalUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in a particular 15-minute interval in the past 24 hours.
SonetSectionCurrentStats MIB table name: SONET-MIB.sonetSectionCurrentTable Monitored class: equipment.PhysicalPort			
codingViolations	long	sonetSectionCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in the current 15 minute interval.
currentStatus	long	sonetSectionCurrentStatus	This variable indicates the status of the interface. The sonetSectionCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects simultaneously. The sonetSectionNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetSectionNoDefect 2 sonetSectionLOS 4 sonetSectionLOF.
erroredSeconds	long	sonetSectionCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
severelyErroredFramingSeconds	long	sonetSectionCurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
severelyErroredSeconds	long	sonetSectionCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
SonetSectionIntervalStats MIB table name: SONET-MIB.sonetSectionIntervalTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
codingViolations	long	sonetSectionIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetSectionIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetSectionIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredFramingSeconds	long	sonetSectionIntervalSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
severelyErroredSeconds	long	sonetSectionIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in a particular 15-minute interval in the past 24 hours.
SonetVtCurrentStats MIB table name: SONET-MIB.sonetVTCurrentTable Monitored class: sonetequipment.TributaryChannel			
codingViolations	long	sonetVTCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH VT in the current 15 minute interval.
currentStatus	long	sonetVTCurrentStatus	This variable indicates the status of the interface. The sonetVTCurrentStatus is a bit map represented as a sum, therefore, it can represent multiple defects and failures simultaneously. The sonetVTNoDefect should be set if and only if no other flag is set. The various bit positions are: 1 sonetVTNoDefect 2 sonetVTLOP 4 sonetVTPathAIS 8 sonetVTPathRDI 16 sonetVTPathRFI 32 sonetVTUnequipped 64 sonetVTSignalLabelMismatch.
currentWidth	int	sonetVTCurrentWidth	A value that indicates the type of the SONET VT and SDH VC. Assigned widths are VT1.5/VC11, VT2/VC12, VT3, VT6/VC2, and VT6c.
erroredSeconds	long	sonetVTCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH VT in the current 15 minute interval.
severelyErroredSeconds	long	sonetVTCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH VT in the current 15 minute interval.

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5620 SAM counter name	Type	MIB counter name	Description
unavailableSeconds	long	sonetVTCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a VT in the current 15 minute interval.
SonetVtIntervalStats MIB table name: SONET-MIB.sonetVTIntervalTable Monitored class: sonetequipment.TributaryChannel			
codingViolations	long	sonetVTIntervalCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH VT in a particular 15-minute interval in the past 24 hours.
erroredSeconds	long	sonetVTIntervalESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH VT in a particular 15-minute interval in the past 24 hours.
intervalNumber	int	sonetVTIntervalNumber	A number between 1 and 96, which identifies the interval for which the set of statistics is available. The interval identified by 1 is the most recently completed 15 minute interval, and the interval identified by N is the interval immediately preceding the one identified by N-1.
severelyErroredSeconds	long	sonetVTIntervalSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH VT in a particular 15-minute interval in the past 24 hours.
unavailableSeconds	long	sonetVTIntervalUASs	The counter associated with the number of Unavailable Seconds encountered by a VT in a particular 15-minute interval in the past 24 hours.

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Table I-39 srrp statistics

5620 SAM counter name	Type	MIB counter name	Description
InstanceStats MIB table name: TIMETRA-MC-REDUNDANCY-MIB.tmnxSrrpStatsTable Monitored class: srrp.Instance			
advertiseIntervalDiscards	long	tmnxSrrpStatsAdvIntDiscards	The value for tmnxSrrpStatsAdvIntDiscards indicates the total number of SRRP advertisement packets discarded because the advertisement interval in the received packet was different than the one configured for the local virtual router.
advertiseIntervalErrors	long	tmnxSrrpStatsAdvIntErrors	The value for tmnxSrrpStatsAdvIntErrors indicates the total number of SRRP advertisement packets received for which the advertisement interval is different than the one configured for the local virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
advertiseRcvd	long	tmnxSrrpStatsAdvRcvd	The value for tmnxSrrpStatsAdvRcvd indicates the total number of SRRP advertisements received by this virtual router.
advertiseSent	long	tmnxSrrpStatsAdvSent	The value for tmnxSrrpStatsAdvSent indicates the total number of SRRP advertisements sent by this virtual router.
becomeBackupRouting	long	tmnxSrrpStatsBecomeBackupRouting	The value for tmnxSrrpStatsBecomeBackupRouting indicates the total number of times that the virtual router's state has transitioned to backup routing state.
becomeBackupShunt	long	tmnxSrrpStatsBecomeBackupShunt	The value for tmnxSrrpStatsBecomeBackupShunt indicates the total number of times that the virtual router's state has transitioned to backup shunt.
becomeMaster	long	tmnxSrrpStatsBecomeMaster	The value for tmnxSrrpStatsBecomeMaster indicates the total number of times that the virtual router's state has transitioned to master.
becomeNonMaster	long	tmnxSrrpStatsBecomeNonMaster	The value for tmnxSrrpStatsBecomeNonMaster indicates the total number times that the virtual router's state has transitioned from master to a non-master state.
masterChanges	long	tmnxSrrpStatsMasterChanges	The value for tmnxSrrpStatsMasterChanges indicates the total number of times the virtual router has seen the master virtual router change.
preemptedEvents	long	tmnxSrrpStatsPreemptedEvents	The value for tmnxSrrpStatsPreemptedEvents indicates the total number of times the virtual router has been preempted by another non-owner master with higher priority.
preemptEvents	long	tmnxSrrpStatsPreemptEvents	The value for tmnxSrrpStatsPreemptEvents indicates the total number of times the virtual router has preempted another non-owner master with lower priority.
priorityZeroPktsRcvd	long	tmnxSrrpStatsPriZeroPktsSent	The value for tmnxSrrpStatsPriZeroPktsSent indicates the total number of SRRP packets sent by the virtual router with a priority of '0'.
priorityZeroPktsSent	long	tmnxSrrpStatsPriZeroPktsRcvd	The value for tmnxSrrpStatsPriZeroPktsRcvd indicates the total number of SRRP packets received by the virtual router with a priority of '0'.

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Table I-40 subscrauth statistics

5620 SAM counter name	Type	MIB counter name	Description
PolicyStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAuthPlcyStatsTable Monitored class: subscrauth.Policy			
rejectedAuthentications	long	tmnxSubAuthPlcyReject	The value of tmnxSubAuthPlcyReject indicates how many subscriber messages (e.g. DHCP, PPPoE, ...) were rejected by the authentication. Note that not all requests are therefore forwarded to radius. If several requests are sent in a short timeframe, only the first one is sent to radius.
successfulAuthentications	long	tmnxSubAuthPlcySuccess	The value of tmnxSubAuthPlcySuccess indicates how many subscriber messages (e.g. DHCP, PPPoE, ...) were authenticated successfully. Note that not all requests are therefore forwarded to radius. If several requests are sent in a short timeframe, only the first one is sent to radius.
RadiusEntryStats MIB table name: TIMETRA-SUBSCRIBER-MGMT-MIB.tmnxSubAuthPlcyRadStatsTable Monitored class: subscrauth.RadiusEntry			
failedAuthenticationRequests	long	tmnxSubAuthPlcyRadSendFail	The value of tmnxSubAuthPlcyRadSendFail indicates how many authentication requests failed because the packet could not be sent out.
md5VerificationFailedRequests	long	tmnxSubAuthPlcyRadMd5Fail	The value of tmnxSubAuthPlcyRadMd5Fail indicates how many times the MD5 verification failed on a msg from this radius server.
pendingAuthenticationRequest	long	tmnxSubAuthPlcyRadPending	The value of tmnxSubAuthPlcyRadPending indicates how many authentication requests are currently pending.
rejectedAuthenticationRequests	long	tmnxSubAuthPlcyRadReject	The value of tmnxSubAuthPlcyRadReject indicates how many authentication requests were rejected by this radius server.
successfulAuthenticationRequests	long	tmnxSubAuthPlcyRadSuccess	The value of tmnxSubAuthPlcyRadSuccess indicates how many authentication requests were accepted by this radius server.
timedOutAuthenticationRequests	long	tmnxSubAuthPlcyRadTimeout	The value of tmnxSubAuthPlcyRadTimeout indicates how many times this radius did not reply to an authentication request within the timeout.

Table I-41 svq statistics

5620 SAM counter name	Type	MIB counter name	Description
CustMultiSvcSiteEgrSchedPlcyPortStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteEgrSchedPlcyPortStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custEgrSchedPlcyPortStatsFwdOct	The value of custEgrSchedPlcyPortStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site egress scheduler policy.
forwardedPackets	UINT128	custEgrSchedPlcyPortStatsFwdPkt	The value of custEgrSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site egress scheduler policy.
portID	long	custEgrSchedPlcyPortStatsPort	The value of custEgrSchedPlcyPortStatsPort is used as an index of the egress QoS scheduler of this customer multi service site. When an MSS assignment is an aps/ccag/lag in 'link' mode, each member-port of the aps/ccag/lag has its own scheduler. This object refers to the TmnxPortID of these member-ports.
CustMultiSvcSiteEgrSchedPlcyStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteEgrSchedPlcyStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custEgrSchedPlcyStatsFwdOct	The value of the object custEgrSchedPlcyStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site egress scheduler policy.
forwardedPackets	UINT128	custEgrSchedPlcyStatsFwdPkt	The value of the object custEgrSchedPlcyStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site egress scheduler policy.
CustMultiSvcSiteIngSchedPlcyPortStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteIngSchedPlcyPortStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custIngSchedPlcyPortStatsFwdOct	The value of custIngSchedPlcyPortStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site ingress scheduler policy.
forwardedPackets	UINT128	custIngSchedPlcyPortStatsFwdPkt	The value of custIngSchedPlcyPortStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site ingress scheduler policy.

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5620 SAM counter name	Type	MIB counter name	Description
portID	long	custIngSchedPlcyPortStatsPort	The value of custIngSchedPlcyPortStatsPort is used as an index of the ingress QoS scheduler of this customer multi service site. When an MSS assignment is an aps/ccag/lag in 'link' mode, each member-port of the aps/ccag/lag has its own scheduler. This object refers to the TmnxPortID of these member-ports.
CustMultiSvcSiteIngSchedPlcyStats MIB table name: TIMETRA-SERV-MIB.custMultiSvcSiteIngSchedPlcyStatsTable Monitored class: svq.AggregationScheduler			
forwardedOctets	UINT128	custIngSchedPlcyStatsFwdOct	The value of the object custIngSchedPlcyStatsFwdOct indicates the number of forwarded octets, as determined by the customer multi service site ingress scheduler policy.
forwardedPackets	UINT128	custIngSchedPlcyStatsFwdPkt	The value of the object custIngSchedPlcyStatsFwdPkt indicates the number of forwarded packets, as determined by the customer multi service site ingress scheduler policy.

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Table I-42 svt statistics

5620 SAM counter name	Type	MIB counter name	Description
MirrorSdpBindingStats MIB table name: TIMETRA-SDP-MIB.sdpBindBaseStatsTable Monitored class: svt.MirrorSdpBinding			
egressForwardedOctets	UINT128	sdpBindBaseStatsEgressForwardedOctets	.
egressForwardedPackets	UINT128	sdpBindBaseStatsEgressForwardedPackets	.
ingressDroppedOctets	UINT128	sdpBindBaseStatsIngDropOctets	.
ingressDroppedPackets	UINT128	sdpBindBaseStatsIngressDroppedPackets	.
ingressForwardedOctets	UINT128	sdpBindBaseStatsIngFwdOctets	.
ingressForwardedPackets	UINT128	sdpBindBaseStatsIngressForwardedPackets	.
SdpBindingBaseStats MIB table name: TIMETRA-SDP-MIB.sdpBindBaseStatsTable Monitored classes: • svt.SpokeSdpBinding • svt.MeshSdpBinding			
egressForwardedOctets	UINT128	sdpBindBaseStatsEgressForwardedOctets	.

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5620 SAM counter name	Type	MIB counter name	Description
egressForwardedPackets	UINT128	sdpBindBaseStatsEgressForwardedPackets	.
ingressDroppedOctets	UINT128	sdpBindBaseStatsIngDropOctets	.
ingressDroppedPackets	UINT128	sdpBindBaseStatsIngressDroppedPackets	.
ingressForwardedOctets	UINT128	sdpBindBaseStatsIngFwdOctets	.
ingressForwardedPackets	UINT128	sdpBindBaseStatsIngressForwardedPackets	.
SdpBindingIgmpSnpgErrorStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sdpBindIgmpSnpgStatsTable Monitored classes: • svt.SpokeSdpBinding • svt.MeshSdpBinding			
sdpBndIgmpSnpgImportPolicyDrops	long	sdpBndIgmpSnpgImportPolicyDrops	The value of the object sdpBndIgmpSnpgImportPolicyDrops indicates the number of times an IGMP Group or Source is dropped because of applying an import policy on this SDP Bind.
sdpBndIgmpSnpgMaxNumGroupsDrops	long	sdpBndIgmpSnpgMaxNumGroupsDrops	The value of the object sdpBndIgmpSnpgMaxNumGroupsDrops indicates the number of times an IGMP Group is dropped because of exceeding the configured maximum number of groups on this SDP Bind.
sdpBndIgmpSnpgMaxNumSourcesDrops	long	sdpBndIgmpSnpgMaxNumSourcesDrops	The value of the object sdpBndIgmpSnpgMaxNumSourcesDrops indicates the number of times an IGMP Source is dropped because of exceeding the configured maximum number of sources per group on this SDP Bind.
sdpBndIgmpSnpgMcacPolicyDrops	long	sdpBndIgmpSnpgMcacPolicyDrops	The value of the object sdpBndIgmpSnpgMcacPolicyDrops indicates the number of times an IGMP Group is dropped because of applying a multicast CAC policy on this SDP Bind.
sdpBndIgmpSnpgRxBadEncodedPkts	long	sdpBndIgmpSnpgRxBadEncodedPkts	The value of the object sdpBndIgmpSnpgRxBadEncodedPkts indicates the number of IGMP packets dropped on this SDP Bind because of a bad encoding.
sdpBndIgmpSnpgRxBadIgmpChksmPkts	long	sdpBndIgmpSnpgRxBadIgmpChksmPkts	The value of the object sdpBndIgmpSnpgRxBadIgmpChksmPkts indicates the number of dropped IGMP packets on this SDP Bind because of a bad IGMP header checksum.
sdpBndIgmpSnpgRxBadIpChksmPkts	long	sdpBndIgmpSnpgRxBadIpChksmPkts	The value of the object sdpBndIgmpSnpgRxBadIpChksmPkts indicates the number of dropped IGMP packets on this SDP Bind because of a bad IPv4 header checksum.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndIgmpSnpgRxBadLenPkts	long	sdpBndIgmpSnpgRxBadLenPkts	The value of the object sdpBndIgmpSnpgRxBadLenPkts indicates the number of IGMP packets dropped on this SDP Bind because of a bad length.
sdpBndIgmpSnpgRxNoRtrAlertPkts	long	sdpBndIgmpSnpgRxNoRtrAlertPkts	The value of the object sdpBndIgmpSnpgRxNoRtrAlertPkts indicates the number of IGMP packets dropped on this SDP Bind because the Router Alert Option in the IP packet is not set.
sdpBndIgmpSnpgRxWrongVersionPkts	long	sdpBndIgmpSnpgRxWrongVersionPkts	The value of the object sdpBndIgmpSnpgRxWrongVersionPkts indicates the total number of IGMP packets with a wrong version received on this SDP Bind.
sdpBndIgmpSnpgRxZeroSrcAdrPkts	long	sdpBndIgmpSnpgRxZeroSrcAdrPkts	The value of the object sdpBndIgmpSnpgRxZeroSrcAdrPkts indicates the number of IGMP packets dropped on this SDP Bind because they contain a zero source IPv4 address.
sdpBndIgmpSnpgSendQueryCfgDrops	long	sdpBndIgmpSnpgSendQueryCfgDrops	The value of the object sdpBndIgmpSnpgSendQueryCfgDrops indicates the number of times an IGMP Query is dropped because the object sdpBndIgmpSnpgCfgSendQueries for this SDP Bind is set to 'enabled(1)'.
SdpBindingIgmpSnpgStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sdpBindIgmpSnpgStatsTable Monitored classes: • svt.SpokeSdpBinding • svt.MeshSdpBinding			
sdpBndIgmpSnpgFwdGenQueries	long	sdpBndIgmpSnpgFwdGenQueries	The value of the object sdpBndIgmpSnpgFwdGenQueries indicates the number of IGMP General Queries forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdGrpSpecQueries	long	sdpBndIgmpSnpgFwdGrpSpecQueries	The value of the object sdpBndIgmpSnpgFwdGrpSpecQueries indicates the number of IGMP Group-Specific Queries forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdSrcSpecQueries	long	sdpBndIgmpSnpgFwdSrcSpecQueries	The value of the object sdpBndIgmpSnpgFwdSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdUnknownType	long	sdpBndIgmpSnpgFwdUnknownType	The value of the object sdpBndIgmpSnpgFwdUnknownType indicates the number of IGMP unknown type packets forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdV1Reports	long	sdpBndIgmpSnpgFwdV1Reports	The value of the object sdpBndIgmpSnpgFwdV1Reports indicates the number of IGMPv1 Reports forwarded on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndIgmpSnpgFwdV2Leaves	long	sdpBndIgmpSnpgFwdV2Leaves	The value of the object sdpBndIgmpSnpgFwdV2Leaves indicates the number of IGMPv2 Leaves forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdV2Reports	long	sdpBndIgmpSnpgFwdV2Reports	The value of the object sdpBndIgmpSnpgFwdV2Reports indicates the number of IGMPv2 Reports forwarded on this SDP Bind.
sdpBndIgmpSnpgFwdV3Reports	long	sdpBndIgmpSnpgFwdV3Reports	The value of the object sdpBndIgmpSnpgFwdV3Reports indicates the number of IGMPv3 Reports forwarded on this SDP Bind.
sdpBndIgmpSnpgRxGenQueries	long	sdpBndIgmpSnpgRxGenQueries	The value of the object sdpBndIgmpSnpgRxGenQueries indicates the number of IGMP General Queries received on this SDP Bind.
sdpBndIgmpSnpgRxGrpSpecQueries	long	sdpBndIgmpSnpgRxGrpSpecQueries	The value of the object sdpBndIgmpSnpgRxGrpSpecQueries indicates the number of IGMP Group-Specific Queries received on this SDP Bind.
sdpBndIgmpSnpgRxSrcSpecQueries	long	sdpBndIgmpSnpgRxSrcSpecQueries	The value of the object sdpBndIgmpSnpgRxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries received on this SDP Bind.
sdpBndIgmpSnpgRxUnknownType	long	sdpBndIgmpSnpgRxUnknownType	The value of the object sdpBndIgmpSnpgRxUnknownType indicates the number of IGMP unknown type packets received on this SDP Bind.
sdpBndIgmpSnpgRxV1Reports	long	sdpBndIgmpSnpgRxV1Reports	The value of the object sdpBndIgmpSnpgRxV1Reports indicates the number of IGMPv1 Reports received on this SDP Bind.
sdpBndIgmpSnpgRxV2Leaves	long	sdpBndIgmpSnpgRxV2Leaves	The value of the object sdpBndIgmpSnpgRxV2Leaves indicates the number of IGMPv2 Leaves received on this SDP Bind.
sdpBndIgmpSnpgRxV2Reports	long	sdpBndIgmpSnpgRxV2Reports	The value of the object sdpBndIgmpSnpgRxV2Reports indicates the number of IGMPv2 Reports received on this SDP Bind.
sdpBndIgmpSnpgRxV3Reports	long	sdpBndIgmpSnpgRxV3Reports	The value of the object sdpBndIgmpSnpgRxV3Reports indicates the number of IGMPv3 Reports received on this SDP Bind.
sdpBndIgmpSnpgTxGenQueries	long	sdpBndIgmpSnpgTxGenQueries	The value of the object sdpBndIgmpSnpgTxGenQueries indicates the number of IGMP General Queries transmitted on this SDP Bind.
sdpBndIgmpSnpgTxGrpSpecQueries	long	sdpBndIgmpSnpgTxGrpSpecQueries	The value of the object sdpBndIgmpSnpgTxGrpSpecQueries indicates the number of IGMP Group-Specific Queries transmitted on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndIgmpSnpgTxSrcSpecQueries	long	sdpBndIgmpSnpgTxSrcSpecQueries	The value of the object sdpBndIgmpSnpgTxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV1Reports	long	sdpBndIgmpSnpgTxV1Reports	The value of the object sdpBndIgmpSnpgTxV1Reports indicates the number of IGMPv1 Reports transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV2Leaves	long	sdpBndIgmpSnpgTxV2Leaves	The value of the object sdpBndIgmpSnpgTxV2Leaves indicates the number of IGMPv2 Leaves transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV2Reports	long	sdpBndIgmpSnpgTxV2Reports	The value of the object sdpBndIgmpSnpgTxV2Reports indicates the number of IGMPv2 Reports transmitted on this SDP Bind.
sdpBndIgmpSnpgTxV3Reports	long	sdpBndIgmpSnpgTxV3Reports	The value of the object sdpBndIgmpSnpgTxV3Reports indicates the number of IGMPv3 Reports transmitted on this SDP Bind.
TunnelKeepAliveStats MIB table name: TIMETRA-SDP-MIB.sdpInfoTable Monitored class: svt.Tunnel			
lateHelloResponses	long	sdpKeepAliveNumLateHelloResponseMessages	The number of SDP Echo Response messages received after the corresponding Request timeout timer expired.
receivedHelloMessages	long	sdpKeepAliveNumHelloResponseMessages	The number of SDP Echo Response messages received since the keep-alive was administratively enabled or the counter was cleared.
transmittedHelloMessages	long	sdpKeepAliveNumHelloRequestMessages	The number of SDP Echo Request messages transmitted since the keep-alive was administratively enabled or the counter was cleared.

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Table I-43 tdmequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
DS1CurrentStats MIB table name: DS1-MIB.dsx1CurrentTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1CurrentBESs	The number of Bursty Errored Seconds.
controlledSlipSeconds	long	dsx1CurrentCSSs	The number of Controlled Slip Seconds.
degradedMinutes	long	dsx1CurrentDMs	The number of Degraded Minutes.
erroredSeconds	long	dsx1CurrentESs	The number of Errored Seconds.

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5620 SAM counter name	Type	MIB counter name	Description
lineCodingViolations	long	dsx1CurrentLCVs	The number of Line Code Violations (LCVs).
lineErroredSeconds	long	dsx1CurrentLESs	The number of Line Errored Seconds.
pBitCodingViolations	long	dsx1CurrentPCVs	The number of Path Coding Violations.
severelyErroredFramingSeconds	long	dsx1CurrentSEFSs	The number of Severely Errored Framing Seconds.
severelyErroredSeconds	long	dsx1CurrentSESs	The number of Severely Errored Seconds.
unavailableSeconds	long	dsx1CurrentUASs	The number of Unavailable Seconds.
DS1FarEndCurrentStats MIB table name: DS1-MIB.dsx1FarEndCurrentTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1FarEndCurrentBESs	The number of Far End Bursty Errored Seconds.
controlledSlipSeconds	long	dsx1FarEndCurrentCSSs	The number of Far End Controlled Slip Seconds.
degradedMinutes	long	dsx1FarEndCurrentDMs	The number of Far End Degraded Minutes.
erroredSeconds	long	dsx1FarEndCurrentESs	The number of Far End Errored Seconds.
invalidIntervals	int	dsx1FarEndInvalidIntervals	The number of intervals in the range from 0 to dsx1FarEndValidIntervals for which no data is available. This object will typically be zero except in cases where the data for some intervals are not available (e.g., in proxy situations).
lineErroredSeconds	long	dsx1FarEndCurrentLESs	The number of Far End Line Errored Seconds.
pathCodingViolations	long	dsx1FarEndCurrentPCVs	The number of Far End Path Coding Violations.
severelyErroredFramingSeconds	long	dsx1FarEndCurrentSEFSs	The number of Far End Severely Errored Framing Seconds.
severelyErroredSeconds	long	dsx1FarEndCurrentSESs	The number of Far End Severely Errored Seconds.
timeElapsed	int	dsx1FarEndTimeElapsed	The number of seconds that have elapsed since the beginning of the far end current error-measurement period. If, for some reason, such as an adjustment in the system's time-of-day clock, the current interval exceeds the maximum value, the agent will return the maximum value.
unavailableSeconds	long	dsx1FarEndCurrentUASs	The number of Unavailable Seconds.

5620 SAM counter name	Type	MIB counter name	Description
validIntervals	int	dsx1FarEndValidIntervals	The number of previous far end intervals for which data was collected. The value will be 96 unless the interface was brought online within the last 24 hours, in which case the value will be the number of complete 15 minute far end intervals since the interface has been online. In the case where the agent is a proxy, it is possible that some intervals are unavailable. In this case, this interval is the maximum interval number for which data is available.
DS1FarEndIntervalStats MIB table name: DS1-MIB.dsx1FarEndIntervalTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1FarEndIntervalBESs	The number of Far End Bursty Errored Seconds.
controlledSlipSeconds	long	dsx1FarEndIntervalCSSs	The number of Far End Controlled Slip Seconds.
degradedMinutes	long	dsx1FarEndIntervalDMs	The number of Far End Degraded Minutes.
erroredSeconds	long	dsx1FarEndIntervalESs	The number of Far End Errored Seconds.
intervalNumber	int	dsx1FarEndIntervalNumber	A number between 1 and 96, where 1 is the most recently completed 15 minute interval and 96 is the 15 minutes interval completed 23 hours and 45 minutes prior to interval 1.
lineErroredSeconds	long	dsx1FarEndIntervalLESs	The number of Far End Line Errored Seconds.
pathCodingViolations	long	dsx1FarEndIntervalPCVs	The number of Far End Path Coding Violations.
severelyErroredFramingSeconds	long	dsx1FarEndIntervalSEFSs	The number of Far End Severely Errored Framing Seconds.
severelyErroredSeconds	long	dsx1FarEndIntervalSESs	The number of Far End Severely Errored Seconds.
unavailableSeconds	long	dsx1FarEndIntervalUASs	The number of Unavailable Seconds.
DS1FarEndTotalStats MIB table name: DS1-MIB.dsx1FarEndTotalTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1FarEndTotalBESs	The number of Bursty Errored Seconds (BESs) encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
controlledSlipSeconds	long	dsx1FarEndTotalCSSs	The number of Far End Controlled Slip Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
degradedMinutes	long	dsx1FarEndTotalDMs	The number of Degraded Minutes (DMs) encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.

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5620 SAM counter name	Type	MIB counter name	Description
erroredSeconds	long	dsx1FarEndTotalESs	The number of Far End Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
lineErroredSeconds	long	dsx1FarEndTotalLESs	The number of Far End Line Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pathCodingViolations	long	dsx1FarEndTotalPCVs	The number of Far End Path Coding Violations reported via the far end block error count encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredFramingSeconds	long	dsx1FarEndTotalSEFSs	The number of Far End Severely Errored Framing Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredSeconds	long	dsx1FarEndTotalSESs	The number of Far End Severely Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
unavailableSeconds	long	dsx1FarEndTotalUASs	The number of Unavailable Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
DS1IntervalStats MIB table name: DS1-MIB.dsx1IntervalTable Monitored class: tdmequipment.DS1E1Channel			
burstyErroredSeconds	long	dsx1IntervalBESs	The number of Bursty Errored Seconds.
controlledSlipSeconds	long	dsx1IntervalCSSs	The number of Controlled Slip Seconds.
degradedMinutes	long	dsx1IntervalDMs	The number of Degraded Minutes.
erroredSeconds	long	dsx1IntervalESs	The number of Errored Seconds.
intervalNumber	int	dsx1IntervalNumber	A number between 1 and 96, where 1 is the most recently completed 15 minute interval and 96 is the 15 minutes interval completed 23 hours and 45 minutes prior to interval 1.
lineCodingViolations	long	dsx1IntervalLCVs	The number of Line Code Violations.
lineErroredSeconds	long	dsx1IntervalLESs	The number of Line Errored Seconds.
pBitCodingViolations	long	dsx1IntervalPCVs	The number of Path Coding Violations.
severelyErroredFramingSeconds	long	dsx1IntervalSEFSs	The number of Severely Errored Framing Seconds.
severelyErroredSeconds	long	dsx1IntervalSESs	The number of Severely Errored Seconds.
unavailableSeconds	long	dsx1IntervalUASs	The number of Unavailable Seconds. This object may decrease if the occurrence of unavailable seconds occurs across an interval boundary.
DS1TotalStats MIB table name: DS1-MIB.dsx1TotalTable Monitored class: tdmequipment.DS1E1Channel			

5620 SAM counter name	Type	MIB counter name	Description
burstyErroredSeconds	long	dsx1TotalBESs	The number of Bursty Errored Seconds (BESs) encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
controlledSlipSeconds	long	dsx1TotalCSSs	The number of Controlled Slip Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
degradedMinutes	long	dsx1TotalDMs	The number of Degraded Minutes (DMs) encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
erroredSeconds	long	dsx1TotalESs	The sum of Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
lineCodingViolations	long	dsx1TotalLCVs	The number of Line Code Violations (LCVs) encountered by a DS1 interface in the current 15 minute interval. Invalid 15 minute intervals count as 0.
lineErroredSeconds	long	dsx1TotalLESs	The number of Line Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pBitCodingViolations	long	dsx1TotalPCVs	The number of Path Coding Violations encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredFramingSeconds	long	dsx1TotalSEFSs	The number of Severely Errored Framing Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredSeconds	long	dsx1TotalSESs	The number of Severely Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
unavailableSeconds	long	dsx1TotalUASs	The number of Unavailable Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
DS3CurrentStats MIB table name: DS3-MIB.dsx3CurrentTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3CurrentCCVs	The number of C-bit Coding Violations.
cBitErroredSeconds	long	dsx3CurrentCESs	The number of C-bit Errored Seconds.
cBitSeverelyErroredSeconds	long	dsx3CurrentCSESs	The number of C-bit Severely Errored Seconds.
lineCodingViolations	long	dsx3CurrentLCVs	The counter associated with the number of Line Coding Violations.
lineErroredSeconds	long	dsx3CurrentLESs	The number of Line Errored Seconds.
pBitCodingViolations	long	dsx3CurrentPCVs	The counter associated with the number of P-bit Coding Violations.

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5620 SAM counter name	Type	MIB counter name	Description
pBitErroredSeconds	long	dsx3CurrentPESs	The counter associated with the number of P-bit Errored Seconds.
pBitSeverelyErroredSeconds	long	dsx3CurrentPSESs	The counter associated with the number of P-bit Severely Errored Seconds.
severelyErroredFramingSeconds	long	dsx3CurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds.
unavailableSeconds	long	dsx3CurrentUASs	The counter associated with the number of Unavailable Seconds.
DS3FarEndCurrentStats MIB table name: DS3-MIB.dsx3FarEndCurrentTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3FarEndCurrentCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count.
cBitErroredSeconds	long	dsx3FarEndCurrentCESs	The counter associated with the number of Far End C-bit Errored Seconds.
cBitSeverelyErroredSeconds	long	dsx3FarEndCurrentCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds.
invalidIntervals	int	dsx3FarEndInvalidIntervals	The number of intervals in the range from 0 to dsx3FarEndValidIntervals for which no data is available. This object will typically be zero except in cases where the data for some intervals are not available (e.g., in proxy situations).
timeElapsed	int	dsx3FarEndTimeElapsed	The number of seconds that have elapsed since the beginning of the far end current error-measurement period. If, for some reason, such as an adjustment in the system's time-of-day clock, the current interval exceeds the maximum value, the agent will return the maximum value.
unavailableSeconds	long	dsx3FarEndCurrentUASs	The counter associated with the number of Far End unavailable seconds.
validIntervals	int	dsx3FarEndValidIntervals	The number of previous far end intervals for which data was collected. The value will be 96 unless the interface was brought online within the last 24 hours, in which case the value will be the number of complete 15 minute far end intervals since the interface has been online. In the case where the agent is a proxy, it is possible that some intervals are unavailable. In this case, this interval is the maximum interval number for which data is available.
DS3FarEndIntervalStats MIB table name: DS3-MIB.dsx3FarEndIntervalTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3FarEndIntervalCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count.

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5620 SAM counter name	Type	MIB counter name	Description
cBitErroredSeconds	long	dsx3FarEndIntervalCESs	The counter associated with the number of Far End C-bit Errored Seconds encountered by a DS3 interface in one of the previous 96, individual 15 minute, intervals. In the case where the agent is a proxy and data is not available, return noSuchInstance.
cBitSeverelyErroredSeconds	long	dsx3FarEndIntervalCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds.
intervalNumber	int	dsx3FarEndIntervalNumber	A number between 1 and 96, where 1 is the most recently completed 15 minute interval and 96 is the 15 minutes interval completed 23 hours and 45 minutes prior to interval 1.
unavailableSeconds	long	dsx3FarEndIntervalUASs	The counter associated with the number of Far End unavailable seconds.
DS3FarEndTotalStats MIB table name: DS3-MIB.dsx3FarEndTotalTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3FarEndTotalCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
cBitErroredSeconds	long	dsx3FarEndTotalCESs	The counter associated with the number of Far End C-bit Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
cBitSeverelyErroredSeconds	long	dsx3FarEndTotalCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
unavailableSeconds	long	dsx3FarEndTotalUASs	The counter associated with the number of Far End unavailable seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
DS3IntervalStats MIB table name: DS3-MIB.dsx3IntervalTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3IntervalCCVs	The number of C-bit Coding Violations.
cBitErroredSeconds	long	dsx3IntervalCESs	The number of C-bit Errored Seconds.
cBitSeverelyErroredSeconds	long	dsx3IntervalCSESs	The number of C-bit Severely Errored Seconds.
intervalNumber	int	dsx3IntervalNumber	A number between 1 and 96, where 1 is the most recently completed 15 minute interval and 96 is the 15 minutes interval completed 23 hours and 45 minutes prior to interval 1.

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5620 SAM counter name	Type	MIB counter name	Description
lineCodingViolations	long	dsx3IntervalLCVs	The counter associated with the number of Line Coding Violations.
lineErroredSeconds	long	dsx3IntervalLESs	The number of Line Errored Seconds (BPVs or illegal zero sequences).
pBitCodingViolations	long	dsx3IntervalPCVs	The counter associated with the number of P-bit Coding Violations.
pBitErroredSeconds	long	dsx3IntervalPESs	The counter associated with the number of P-bit Errored Seconds.
pBitSeverelyErroredSeconds	long	dsx3IntervalPSESs	The counter associated with the number of P-bit Severely Errored Seconds.
severelyErroredFramingSeconds	long	dsx3IntervalSEFSs	The counter associated with the number of Severely Errored Framing Seconds.
unavailableSeconds	long	dsx3IntervalUASs	The counter associated with the number of Unavailable Seconds. This object may decrease if the occurrence of unavailable seconds occurs across an interval boundary.
DS3TotalStats MIB table name: DS3-MIB.dsx3TotalTable Monitored class: tdmequipment.DS3E3Channel			
cBitCodingViolations	long	dsx3TotalCCVs	The number of C-bit Coding Violations encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
cBitErroredSeconds	long	dsx3TotalCESs	The number of C-bit Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
cBitSeverelyErroredSeconds	long	dsx3TotalCSESs	The number of C-bit Severely Errored Seconds encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
lineCodingViolations	long	dsx3TotalLCVs	The counter associated with the number of Line Coding Violations encountered by a DS3/E3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
lineErroredSeconds	long	dsx3TotalLESs	The number of Line Errored Seconds (BPVs or illegal zero sequences) encountered by a DS3/E3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pBitCodingViolations	long	dsx3TotalPCVs	The counter associated with the number of P-bit Coding Violations, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
pBitErroredSeconds	long	dsx3TotalPESs	The counter associated with the number of P-bit Errored Seconds, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.

5620 SAM counter name	Type	MIB counter name	Description
pBitSeverelyErroredSeconds	long	dsx3TotalPSESs	The counter associated with the number of P-bit Severely Errored Seconds, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
severelyErroredFramingSeconds	long	dsx3TotalSEFSs	The counter associated with the number of Severely Errored Framing Seconds, encountered by a DS3/E3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.
unavailableSeconds	long	dsx3TotalUASs	The counter associated with the number of Unavailable Seconds, encountered by a DS3 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0.

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5620 SAM counter name	Type	MIB counter name	Description
CircuitDhcpRelayCfgStats MIB table name: TIMETRA-SDP-MIB.sdpBindDhcpStatsTable Monitored class: svt.SdpBinding			
sdpBindDhcpStatsClntDropdPckts	long	sdpBindDhcpStatsClntDropdPckts	The value of the object sdpBindDhcpStatsClntDropdPckts indicates the number of DHCP client packets that have been dropped on this SDP bind.
sdpBindDhcpStatsClntForwdPckts	long	sdpBindDhcpStatsClntForwdPckts	The value of the object sdpBindDhcpStatsClntForwdPckts indicates the number of DHCP client packets that have been forwarded on this SDP bind.
sdpBindDhcpStatsClntProxLSPckts	long	sdpBindDhcpStatsClntProxLSPckts	The value of the object sdpBindDhcpStatsClntProxLSPckts indicates the number of DHCP client packets that have been proxied on this SDP bind based on a lease state. The lease itself can have been obtained from a DHCP or RADIUS server. This is the so called lease split functionality.
sdpBindDhcpStatsClntProxRadPckts	long	sdpBindDhcpStatsClntProxRadPckts	The value of the object sdpBindDhcpStatsClntProxRadPckts indicates the number of DHCP client packets that have been proxied on this SDP bind based on data received from a RADIUS server.
sdpBindDhcpStatsClntSnoopdPckts	long	sdpBindDhcpStatsClntSnoopdPckts	The value of the object sdpBindDhcpStatsClntSnoopdPckts indicates the number of DHCP client packets that have been snooped on this SDP bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBindDhcpStatsGenForceRenPckts	long	sdpBindDhcpStatsGenForceRenPckts	The value of the object sdpBindDhcpStatsGenForceRenPckts indicates the number of DHCP FORCERENEW messages spoofed on this SDP bind to the DHCP clients.
sdpBindDhcpStatsGenReleasePckts	long	sdpBindDhcpStatsGenReleasePckts	The value of the object sdpBindDhcpStatsGenReleasePckts indicates the number of DHCP RELEASE messages spoofed on this SDP bind to the DHCP server.
sdpBindDhcpStatsSrvrDropdPckts	long	sdpBindDhcpStatsSrvrDropdPckts	The value of the object sdpBindDhcpStatsSrvrDropdPckts indicates the number of DHCP server packets that have been dropped on this SDP bind.
sdpBindDhcpStatsSrvrForwdPckts	long	sdpBindDhcpStatsSrvrForwdPckts	The value of the object sdpBindDhcpStatsSrvrForwdPckts indicates the number of DHCP server packets that have been forwarded on this SDP bind.
sdpBindDhcpStatsSrvrSnoopdPckts	long	sdpBindDhcpStatsSrvrSnoopdPckts	The value of the object sdpBindDhcpStatsSrvrSnoopdPckts indicates the number of DHCP server packets that have been snooped on this SDP bind.
InterfacePimSnoopingStats MIB table name: TIMETRA-PIM-SNOOPING-MIB.tmnxPimSnpgIfStatsTable Monitored class: vpls.InterfacePimSnooping			
tmnxPimSnpgIfJoinPolicyDrops	long	tmnxPimSnpgIfJoinPolicyDrops	The value of tmnxPimSnpgIfJoinPolicyDrops indicates the number of times the join policy match resulted in dropping PIM Join-Prune Message or one of the source group contained in the message.
tmnxPimSnpgIfRxBadChecksumDscrd	long	tmnxPimSnpgIfRxBadChecksumDscrd	The value of tmnxPimSnpgIfRxBadChecksumDscrd indicates the number of PIM messages received on this interface which were discarded because of bad checksum.
tmnxPimSnpgIfRxBadEncodings	long	tmnxPimSnpgIfRxBadEncodings	The value of tmnxPimSnpgIfRxBadEncodings indicates the number of PIM messages with bad encodings received on this interface.
tmnxPimSnpgIfRxBadVersionDscrd	long	tmnxPimSnpgIfRxBadVersionDscrd	The value of tmnxPimSnpgIfRxBadVersionDscrd indicates the number of PIM messages with bad versions received on this interface.
tmnxPimSnpgIfRxHellos	long	tmnxPimSnpgIfRxHellos	The value of tmnxPimSnpgIfRxHellos indicates the number of PIM hello messages received on this interface.
tmnxPimSnpgIfRxHellosDropped	long	tmnxPimSnpgIfRxHellosDropped	The value of tmnxPimSnpgIfRxHellosDropped indicates the number of PIM Hello messages which were received on this interface but were dropped.

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5620 SAM counter name	Type	MIB counter name	Description
tmnxPimSnpgIfRxJoinPruneErrs	long	tmnxPimSnpgIfRxJoinPruneErrs	The value of tmnxPimSnpgIfRxJoinPruneErrs indicates the number of errors while processing Join-Prune messages received on this interface.
tmnxPimSnpgIfRxJoinPrunes	long	tmnxPimSnpgIfRxJoinPrunes	The value of tmnxPimSnpgIfRxJoinPrunes indicates the number of PIM Join Prune messages received on this interface.
tmnxPimSnpgIfRxNbrUnknown	long	tmnxPimSnpgIfRxNbrUnknown	The value of tmnxPimSnpgIfRxNbrUnknown indicates the number of PIM messages (other than Hello messages) which were received on this interface and were rejected because the adjacency with the neighbor router was not already established.
tmnxPimSnpgIfRxPkts	long	tmnxPimSnpgIfRxPkts	The value of tmnxPimSnpgIfRxPkts indicates the number of multicast data packets received on this interface.
tmnxPimSnpgIfSGTypes	long	tmnxPimSnpgIfSGTypes	The value of tmnxPimSnpgIfSGTypes indicates the number of (S,G) entries in tmnxPimSnpgIfGrpSrcTable.
tmnxPimSnpgIfStarGTypes	long	tmnxPimSnpgIfStarGTypes	The value of tmnxPimSnpgIfStarGTypes indicates the number of (*,G) entries in tmnxPimSnpgIfGrpSrcTable.
tmnxPimSnpgIfTxJoinPrunes	long	tmnxPimSnpgIfTxJoinPrunes	The value of tmnxPimSnpgIfTxJoinPrunes indicates the number of PIM Join Prune messages transmitted on this interface.
tmnxPimSnpgIfTxPkts	long	tmnxPimSnpgIfTxPkts	The value of tmnxPimSnpgIfTxPkts indicates the number of multicast data packets transmitted on this interface.
L2AccessInterfaceIgmpSnpgErrorStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sapIgmpSnpgStatsTable Monitored classes: • vpls.AbstractL2AccessInterface • vpls.IL2AccessInterface • mvpls.IL2AccessInterface			
sapIgmpSnpgImportPolicyDrops	long	sapIgmpSnpgImportPolicyDrops	The value of the object sapIgmpSnpgImportPolicyDrops indicates the number of times an IGMP Group or Source is dropped because of applying an import policy on this SAP.
sapIgmpSnpgMaxNumGroupsDrops	long	sapIgmpSnpgMaxNumGroupsDrops	The value of the object sapIgmpSnpgMaxNumGroupsDrops indicates the number of times an IGMP Group is dropped because of exceeding the configured maximum number of groups on this SAP.
sapIgmpSnpgMaxNumSourcesDrops	long	sapIgmpSnpgMaxNumSourcesDrops	The value of the object sapIgmpSnpgMaxNumSourcesDrops indicates the number of times an IGMP Source is dropped because of exceeding the configured maximum number of sources per group on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgMcacPolicyDrops	long	sapIgmpSnpgMcacPolicyDrops	The value of the object sapIgmpSnpgMcacPolicyDrops indicates the number of times an IGMP Group is dropped because of applying a multicast CAC policy on this SAP.
sapIgmpSnpgMcsFailures	long	sapIgmpSnpgMcsFailures	The value of the object sapIgmpSnpgMcsFailures indicates the number of times an IGMP Group on this SAP could not be synced to the MCS (multi-chassis synchronization) database.
sapIgmpSnpgRxBadEncodedPkts	long	sapIgmpSnpgRxBadEncodedPkts	The value of the object sapIgmpSnpgRxBadEncodedPkts indicates the number of IGMP packets dropped on this SAP because of a bad encoding.
sapIgmpSnpgRxBadIgmpChksmPkts	long	sapIgmpSnpgRxBadIgmpChksmPkts	The value of the object sapIgmpSnpgRxBadIgmpChksmPkts indicates the number of dropped IGMP packets on this SAP because of a bad IGMP header checksum.
sapIgmpSnpgRxBadIpChksmPkts	long	sapIgmpSnpgRxBadIpChksmPkts	The value of the object sapIgmpSnpgRxBadIpChksmPkts indicates the number of dropped IGMP packets on this SAP because of a bad IPv4 header checksum.
sapIgmpSnpgRxBadLenPkts	long	sapIgmpSnpgRxBadLenPkts	The value of the object sapIgmpSnpgRxBadLenPkts indicates the number of IGMP packets dropped on this SAP because of a bad length.
sapIgmpSnpgRxNoRtrAlertPkts	long	sapIgmpSnpgRxNoRtrAlertPkts	The value of the object sapIgmpSnpgRxNoRtrAlertPkts indicates the number of IGMP packets dropped on this SAP because the Router Alert Option in the IP packet is not set.
sapIgmpSnpgRxWrongVersionPkts	long	sapIgmpSnpgRxWrongVersionPkts	The value of the object sapIgmpSnpgRxWrongVersionPkts indicates the total number of IGMP packets with a wrong version received on this SAP.
sapIgmpSnpgRxZeroSrcAdrPkts	long	sapIgmpSnpgRxZeroSrcAdrPkts	The value of the object sapIgmpSnpgRxZeroSrcAdrPkts indicates the number of IGMP packets dropped on this SAP because they contain a zero source IPv4 address.
sapIgmpSnpgSendQueryCfgDrops	long	sapIgmpSnpgSendQueryCfgDrops	The value of the object sapIgmpSnpgSendQueryCfgDrops indicates the number of times an IGMP Query is dropped because the object sapIgmpSnpgCfgSendQueries for this SAP is set to 'enabled(1)'.
L2AccessInterfaceIgmpSnpgStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sapIgmpSnpgStatsTable Monitored classes: • vpls.AbstractL2AccessInterface • vpls.IL2AccessInterface • mvpls.IL2AccessInterface			

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgFwdGenQueries	long	sapIgmpSnpgFwdGenQueries	The value of the object sapIgmpSnpgFwdGenQueries indicates the number of IGMP General Queries forwarded on this SAP.
sapIgmpSnpgFwdGrpSpecQueries	long	sapIgmpSnpgFwdGrpSpecQueries	The value of the object sapIgmpSnpgFwdGrpSpecQueries indicates the number of IGMP Group-Specific Queries forwarded on this SAP.
sapIgmpSnpgFwdSrcSpecQueries	long	sapIgmpSnpgFwdSrcSpecQueries	The value of the object sapIgmpSnpgFwdSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries forwarded on this SAP.
sapIgmpSnpgFwdUnknownType	long	sapIgmpSnpgFwdUnknownType	The value of the object sapIgmpSnpgFwdUnknownType indicates the number of IGMP unknown type packets forwarded on this SAP.
sapIgmpSnpgFwdV1Reports	long	sapIgmpSnpgFwdV1Reports	The value of the object sapIgmpSnpgFwdV1Reports indicates the number of IGMPv1 Reports forwarded on this SAP.
sapIgmpSnpgFwdV2Leaves	long	sapIgmpSnpgFwdV2Leaves	The value of the object sapIgmpSnpgFwdV2Leaves indicates the number of IGMPv2 Leaves forwarded on this SAP.
sapIgmpSnpgFwdV2Reports	long	sapIgmpSnpgFwdV2Reports	The value of the object sapIgmpSnpgFwdV2Reports indicates the number of IGMPv2 Reports forwarded on this SAP.
sapIgmpSnpgFwdV3Reports	long	sapIgmpSnpgFwdV3Reports	The value of the object sapIgmpSnpgFwdV3Reports indicates the number of IGMPv3 Reports forwarded on this SAP.
sapIgmpSnpgRxGenQueries	long	sapIgmpSnpgRxGenQueries	The value of the object sapIgmpSnpgRxGenQueries indicates the number of IGMP General Queries received on this SAP.
sapIgmpSnpgRxGrpSpecQueries	long	sapIgmpSnpgRxGrpSpecQueries	The value of the object sapIgmpSnpgRxGrpSpecQueries indicates the number of IGMP Group-Specific Queries received on this SAP.
sapIgmpSnpgRxSrcSpecQueries	long	sapIgmpSnpgRxSrcSpecQueries	The value of the object sapIgmpSnpgRxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries received on this SAP.
sapIgmpSnpgRxUnknownType	long	sapIgmpSnpgRxUnknownType	The value of the object sapIgmpSnpgRxUnknownType indicates the number of IGMP unknown type packets received on this SAP.
sapIgmpSnpgRxV1Reports	long	sapIgmpSnpgRxV1Reports	The value of the object sapIgmpSnpgRxV1Reports indicates the number of IGMPv1 Reports received on this SAP.

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgRxV2Leaves	long	sapIgmpSnpgRxV2Leaves	The value of the object sapIgmpSnpgRxV2Leaves indicates the number of IGMPv2 Leaves received on this SAP.
sapIgmpSnpgRxV2Reports	long	sapIgmpSnpgRxV2Reports	The value of the object sapIgmpSnpgRxV2Reports indicates the number of IGMPv2 Reports received on this SAP.
sapIgmpSnpgRxV3Reports	long	sapIgmpSnpgRxV3Reports	The value of the object sapIgmpSnpgRxV3Reports indicates the number of IGMPv3 Reports received on this SAP.
sapIgmpSnpgTxGenQueries	long	sapIgmpSnpgTxGenQueries	The value of the object sapIgmpSnpgTxGenQueries indicates the number of IGMP General Queries transmitted on this SAP.
sapIgmpSnpgTxGrpSpecQueries	long	sapIgmpSnpgTxGrpSpecQueries	The value of the object sapIgmpSnpgTxGrpSpecQueries indicates the number of IGMP Group-Specific Queries transmitted on this SAP.
sapIgmpSnpgTxSrcSpecQueries	long	sapIgmpSnpgTxSrcSpecQueries	The value of the object sapIgmpSnpgTxSrcSpecQueries indicates the number of IGMP Group-And-Source-Specific Queries transmitted on this SAP.
sapIgmpSnpgTxV1Reports	long	sapIgmpSnpgTxV1Reports	The value of the object sapIgmpSnpgTxV1Reports indicates the number of IGMPv1 Reports transmitted on this SAP.
sapIgmpSnpgTxV2Leaves	long	sapIgmpSnpgTxV2Leaves	The value of the object sapIgmpSnpgTxV2Leaves indicates the number of IGMPv2 Leaves transmitted on this SAP.
sapIgmpSnpgTxV2Reports	long	sapIgmpSnpgTxV2Reports	The value of the object sapIgmpSnpgTxV2Reports indicates the number of IGMPv2 Reports transmitted on this SAP.
sapIgmpSnpgTxV3Reports	long	sapIgmpSnpgTxV3Reports	The value of the object sapIgmpSnpgTxV3Reports indicates the number of IGMPv3 Reports transmitted on this SAP.
L2AccessInterfaceMldMvrStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sapMldSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapMldSnpgMvrFromVplsCfgDrops	long	sapMldSnpgMvrFromVplsCfgDrops	The value of the object sapMldSnpgMvrFromVplsCfgDrops indicates the number of times an MLD group or Query is dropped because of applying the sapMldSnpgCfgMvrFromVplsId configuration on this SAP.

5620 SAM counter name	Type	MIB counter name	Description
sapMldSnpgMvrToSapCfgDrops	long	sapMldSnpgMvrToSapCfgDrops	The value of the object sapMldSnpgMvrToSapCfgDrops indicates the number times an MLD Report or Query is dropped because of applying the sapMldSnpgCfgMvrToSapPortId and sapMldSnpgCfgMvrToSapEncapVal configuration on this SAP.
L2AccessInterfaceMldSnpgErrorStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sapMldSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapMldSnpgImportPolicyDrops	long	sapMldSnpgImportPolicyDrops	The value of the object sapMldSnpgImportPolicyDrops indicates the number of times an MLD group or source is dropped because of applying an import policy on this SAP.
sapMldSnpgMaxNumGroupsDrops	long	sapMldSnpgMaxNumGroupsDrops	The value of the object sapMldSnpgMaxNumGroupsDrops indicates the number of times an MLD group is dropped because of exceeding the configured maximum number of groups on this SAP.
sapMldSnpgMcsFailures	long	sapMldSnpgMcsFailures	The value of the object sapMldSnpgMcsFailures indicates the number of times an MLD group on this SAP could not be synced to the MCS (multi-chassis synchronization) database.
sapMldSnpgRxBadEncodedPkts	long	sapMldSnpgRxBadEncodedPkts	The value of the object sapMldSnpgRxBadEncodedPkts indicates the number of MLD packets dropped on this SAP because of a bad encoding.
sapMldSnpgRxBadLenPkts	long	sapMldSnpgRxBadLenPkts	The value of the object sapMldSnpgRxBadLenPkts indicates the number of MLD packets dropped on this SAP because of a bad length.
sapMldSnpgRxBadMldChksmPkts	long	sapMldSnpgRxBadMldChksmPkts	The value of the object sapMldSnpgRxBadMldChksmPkts indicates the number of dropped MLD packets on this SAP because of a bad MLD header checksum.
sapMldSnpgRxNoRtrAlertPkts	long	sapMldSnpgRxNoRtrAlertPkts	The value of the object sapMldSnpgRxNoRtrAlertPkts indicates the number of MLD packets dropped on this SAP because the Router Alert Option in the IP packet is not set.
sapMldSnpgRxWrongVersionPkts	long	sapMldSnpgRxWrongVersionPkts	The value of the object sapMldSnpgRxWrongVersionPkts indicates the total number of MLD packets with a wrong version received on this SAP.
sapMldSnpgRxZeroSrcAdrPkts	long	sapMldSnpgRxZeroSrcAdrPkts	The value of the object sapMldSnpgRxZeroSrcAdrPkts indicates the number of MLD packets dropped on this SAP because they contain a zero source IPv6 address.

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5620 SAM counter name	Type	MIB counter name	Description
sapMldSnpgSendQueryCfgDrops	long	sapMldSnpgSendQueryCfgDrops	The value of the object sapMldSnpgSendQueryCfgDrops indicates the number of times an MLD Query is dropped because the object sapMldSnpgCfgSendQueries for this SAP is set to 'inService(2)'.
L2AccessInterfaceMldSnpgStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sapMldSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapMldSnpgFwdGenQueries	long	sapMldSnpgFwdGenQueries	The value of the object sapMldSnpgFwdGenQueries indicates the number of MLD General Queries forwarded on this SAP.
sapMldSnpgFwdGrpSpecQueries	long	sapMldSnpgFwdGrpSpecQueries	The value of the object sapMldSnpgFwdGrpSpecQueries indicates the number of MLD Group-Specific Queries forwarded on this SAP.
sapMldSnpgFwdSrcSpecQueries	long	sapMldSnpgFwdSrcSpecQueries	The value of the object sapMldSnpgFwdSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries forwarded on this SAP.
sapMldSnpgFwdUnknownType	long	sapMldSnpgFwdUnknownType	The value of the object sapMldSnpgFwdUnknownType indicates the number of MLD unknown type packets forwarded on this SAP.
sapMldSnpgFwdV1Leaves	long	sapMldSnpgFwdV1Leaves	The value of the object sapMldSnpgFwdV1Leaves indicates the number of MLDv1 Leaves forwarded on this SAP.
sapMldSnpgFwdV1Reports	long	sapMldSnpgFwdV1Reports	The value of the object sapMldSnpgFwdV1Reports indicates the number of MLDv1 Reports forwarded on this SAP.
sapMldSnpgFwdV2Reports	long	sapMldSnpgFwdV2Reports	The value of the object sapMldSnpgFwdV2Reports indicates the number of MLDv2 Reports forwarded on this SAP.
sapMldSnpgRxGenQueries	long	sapMldSnpgRxGenQueries	The value of the object sapMldSnpgRxGenQueries indicates the number of MLD General Queries received on this SAP.
sapMldSnpgRxGrpSpecQueries	long	sapMldSnpgRxGrpSpecQueries	The value of the object sapMldSnpgRxGrpSpecQueries indicates the number of MLD Group-Specific Queries received on this SAP.
sapMldSnpgRxLocalScopePkts	long	sapMldSnpgRxLocalScopePkts	The value of the object sapMldSnpgRxLocalScopePkts indicates the number of MLD packets received on the link-local scope IPv6 multicast address.

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5620 SAM counter name	Type	MIB counter name	Description
sapMldSnpgRxRsvdScopePkts	long	sapMldSnpgRxRsvdScopePkts	The value of the object sapMldSnpgRxRsvdScopePkts indicates the number of MLD packets received on the reserved scope IPv6 multicast address.
sapMldSnpgRxSrcSpecQueries	long	sapMldSnpgRxSrcSpecQueries	The value of the object sapMldSnpgRxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries received on this SAP.
sapMldSnpgRxUnknownType	long	sapMldSnpgRxUnknownType	The value of the object sapMldSnpgRxUnknownType indicates the number of MLD unknown type packets received on this SAP.
sapMldSnpgRxV1Leaves	long	sapMldSnpgRxV1Leaves	The value of the object sapMldSnpgRxV1Leaves indicates the number of MLDv1 Leaves received on this SAP.
sapMldSnpgRxV1Reports	long	sapMldSnpgRxV1Reports	The value of the object sapMldSnpgRxV1Reports indicates the number of MLDv1 Reports received on this SAP.
sapMldSnpgRxV2Reports	long	sapMldSnpgRxV2Reports	The value of the object sapMldSnpgRxV2Reports indicates the number of MLDv2 Reports received on this SAP.
sapMldSnpgTxGenQueries	long	sapMldSnpgTxGenQueries	The value of the object sapMldSnpgTxGenQueries indicates the number of MLD General Queries transmitted on this SAP.
sapMldSnpgTxGrpSpecQueries	long	sapMldSnpgTxGrpSpecQueries	The value of the object sapMldSnpgTxGrpSpecQueries indicates the number of MLD Group-Specific Queries transmitted on this SAP.
sapMldSnpgTxSrcSpecQueries	long	sapMldSnpgTxSrcSpecQueries	The value of the object sapMldSnpgTxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries transmitted on this SAP.
sapMldSnpgTxV1Leaves	long	sapMldSnpgTxV1Leaves	The value of the object sapMldSnpgTxV1Leaves indicates the number of MLDv1 Leaves transmitted on this SAP.
sapMldSnpgTxV1Reports	long	sapMldSnpgTxV1Reports	The value of the object sapMldSnpgTxV1Reports indicates the number of MLDv1 Reports transmitted on this SAP.
sapMldSnpgTxV2Reports	long	sapMldSnpgTxV2Reports	The value of the object sapMldSnpgTxV2Reports indicates the number of MLDv2 Reports transmitted on this SAP.
L2AccessInterfaceMvrStats MIB table name: ALCATEL-IGMP-SNOOPING-MIB.sapIgmpSnpgStatsTable Monitored class: vpls.AbstractL2AccessInterface			

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5620 SAM counter name	Type	MIB counter name	Description
sapIgmpSnpgMvrFromVplsCfgDrops	long	sapIgmpSnpgMvrFromVplsCfgDrops	The value of the object sapIgmpSnpgMvrFromVplsCfgDrops indicates the number of times an IGMP Group or Query is dropped because of applying the sapIgmpSnpgCfgMvrFromVplsId configuration on this SAP.
sapIgmpSnpgMvrToSapCfgDrops	long	sapIgmpSnpgMvrToSapCfgDrops	The value of the object sapIgmpSnpgMvrToSapCfgDrops indicates the number times an IGMP Report or Query is dropped because of applying the sapIgmpSnpgCfgMvrToSapPortId and sapIgmpSnpgCfgMvrToSapEncapVal configuration on this SAP.
L2AccessItfDhcpRelayCfgStats MIB table name: TIMETRA-SAP-MIB.sapTlsDhcpStatsTable Monitored class: vpls.AbstractL2AccessInterface			
sapTlsDhcpStatsClntDropdPckts	long	sapTlsDhcpStatsClntDropdPckts	The value of the object sapTlsDhcpStatsClntDropdPckts indicates the number of DHCP client packets that have been dropped on this SAP.
sapTlsDhcpStatsClntForwdPckts	long	sapTlsDhcpStatsClntForwdPckts	The value of the object sapTlsDhcpStatsClntForwdPckts indicates the number of DHCP client packets that have been forwarded on this SAP.
sapTlsDhcpStatsClntProxLSPckts	long	sapTlsDhcpStatsClntProxLSPckts	The value of the object sapTlsDhcpStatsClntProxLSPckts indicates the number of DHCP client packets that have been proxied on this SAP based on a lease state. The lease itself can have been obtained from a DHCP or RADIUS server. This is the so called lease split functionality.
sapTlsDhcpStatsClntProxRadPckts	long	sapTlsDhcpStatsClntProxRadPckts	The value of the object sapTlsDhcpStatsClntProxRadPckts indicates the number of DHCP client packets that have been proxied on this SAP based on data received from a RADIUS server.
sapTlsDhcpStatsClntSnoopdPckts	long	sapTlsDhcpStatsClntSnoopdPckts	The value of the object sapTlsDhcpStatsClntSnoopdPckts indicates the number of DHCP client packets that have been snooped on this SAP.
sapTlsDhcpStatsGenForceRenPckts	long	sapTlsDhcpStatsGenForceRenPckts	The value of the object sapTlsDhcpStatsGenForceRenPckts indicates the number of DHCP FORCERENEW messages spoofed on this SAP to the DHCP clients.
sapTlsDhcpStatsGenReleasePckts	long	sapTlsDhcpStatsGenReleasePckts	The value of the object sapTlsDhcpStatsGenReleasePckts indicates the number of DHCP RELEASE messages spoofed on this SAP to the DHCP server.

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5620 SAM counter name	Type	MIB counter name	Description
sapTlsDhcpStatsSrvrDropdPckts	long	sapTlsDhcpStatsSrvrDropdPckts	The value of the object sapTlsDhcpStatsSrvrDropdPckts indicates the number of DHCP server packets that have been dropped on this SAP.
sapTlsDhcpStatsSrvrForwdPckts	long	sapTlsDhcpStatsSrvrForwdPckts	The value of the object sapTlsDhcpStatsSrvrForwdPckts indicates the number of DHCP server packets that have been forwarded on this SAP.
sapTlsDhcpStatsSrvrSnoopdPckts	long	sapTlsDhcpStatsSrvrSnoopdPckts	The value of the object sapTlsDhcpStatsSrvrSnoopdPckts indicates the number of DHCP server packets that have been snooped on this SAP.
SdpBindingMldSnpgErrorStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sdpBindMldSnpgStatsTable Monitored class: vpls.SdpBindingMldSnpgCfg			
sdpBndMldSnpgImportPolicyDrops	long	sdpBndMldSnpgImportPolicyDrops	The value of the object sdpBndMldSnpgImportPolicyDrops indicates the number of times an MLD group or source is dropped because of applying an import policy on this SDP Bind.
sdpBndMldSnpgMaxNumGroupsDrops	long	sdpBndMldSnpgMaxNumGroupsDrops	The value of the object sdpBndMldSnpgMaxNumGroupsDrops indicates the number of times an MLD group is dropped because of exceeding the configured maximum number of groups on this SDP Bind.
sdpBndMldSnpgRxBadEncodedPkts	long	sdpBndMldSnpgRxBadEncodedPkts	The value of the object sdpBndMldSnpgRxBadEncodedPkts indicates the number of MLD packets dropped on this SDP Bind because of a bad encoding.
sdpBndMldSnpgRxBadLenPkts	long	sdpBndMldSnpgRxBadLenPkts	The value of the object sdpBndMldSnpgRxBadLenPkts indicates the number of MLD packets dropped on this SDP Bind because of a bad length.
sdpBndMldSnpgRxBadMldChksmPkts	long	sdpBndMldSnpgRxBadMldChksmPkts	The value of the object sdpBndMldSnpgRxBadMldChksmPkts indicates the number of dropped MLD packets on this SDP Bind because of a bad MLD header checksum.
sdpBndMldSnpgRxLocalScopePkts	long	sdpBndMldSnpgRxLocalScopePkts	The value of the object sdpBndMldSnpgRxLocalScopePkts indicates the number of MLD packets received on the link-local scope IPv6 multicast address.
sdpBndMldSnpgRxNoRtrAlertPkts	long	sdpBndMldSnpgRxNoRtrAlertPkts	The value of the object sdpBndMldSnpgRxNoRtrAlertPkts indicates the number of MLD packets dropped on this SDP Bind because the Router Alert Option in the IP packet is not set.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndMldSnpgRxRsvdScopePkts	long	sdpBndMldSnpgRxRsvdScopePkts	The value of the object sdpBndMldSnpgRxRsvdScopePkts indicates the number of MLD packets received on the reserved scope IPv6 multicast address.
sdpBndMldSnpgRxWrongVersionPkts	long	sdpBndMldSnpgRxWrongVersionPkts	The value of the object sdpBndMldSnpgRxWrongVersionPkts indicates the total number of MLD packets with a wrong version received on this SDP Bind.
sdpBndMldSnpgRxZeroSrcAdrPkts	long	sdpBndMldSnpgRxZeroSrcAdrPkts	The value of the object sdpBndMldSnpgRxZeroSrcAdrPkts indicates the number of MLD packets dropped on this SDP Bind because they contain a zero source IPv6 address.
sdpBndMldSnpgSendQueryCfgDrops	long	sdpBndMldSnpgSendQueryCfgDrops	The value of the object sdpBndMldSnpgSendQueryCfgDrops indicates the number of times an MLD Query is dropped because the object sdpBndMldSnpgCfgSendQueries for this SDP Bind is set to 'inService(2)'.
SdpBindingMldSnpgStats MIB table name: TIMETRA-MLD-SNOOPING-MIB.sdpBindMldSnpgStatsTable Monitored class: vpls.SdpBindingMldSnpgCfg			
sdpBndMldSnpgFwdGenQueries	long	sdpBndMldSnpgFwdGenQueries	The value of the object sdpBndMldSnpgFwdGenQueries indicates the number of MLD General Queries forwarded on this SDP Bind.
sdpBndMldSnpgFwdGrpSpecQueries	long	sdpBndMldSnpgFwdGrpSpecQueries	The value of the object sdpBndMldSnpgFwdGrpSpecQueries indicates the number of MLD Group-Specific Queries forwarded on this SDP Bind.
sdpBndMldSnpgFwdSrcSpecQueries	long	sdpBndMldSnpgFwdSrcSpecQueries	The value of the object sdpBndMldSnpgFwdSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries forwarded on this SDP Bind.
sdpBndMldSnpgFwdUnknownType	long	sdpBndMldSnpgFwdUnknownType	The value of the object sdpBndMldSnpgFwdUnknownType indicates the number of MLD unknown type packets forwarded on this SDP Bind.
sdpBndMldSnpgFwdV1Leaves	long	sdpBndMldSnpgFwdV1Leaves	The value of the object sdpBndMldSnpgFwdV1Leaves indicates the number of MLDv1 Leaves forwarded on this SDP Bind.
sdpBndMldSnpgFwdV1Reports	long	sdpBndMldSnpgFwdV1Reports	The value of the object sdpBndMldSnpgFwdV1Reports indicates the number of MLDv1 Reports forwarded on this SDP Bind.
sdpBndMldSnpgFwdV2Reports	long	sdpBndMldSnpgFwdV2Reports	The value of the object sdpBndMldSnpgFwdV2Reports indicates the number of MLDv2 Reports forwarded on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
sdpBndMldSnpgRxGenQueries	long	sdpBndMldSnpgRxGenQueries	The value of the object sdpBndMldSnpgRxGenQueries indicates the number of MLD General Queries received on this SDP Bind.
sdpBndMldSnpgRxGrpSpecQueries	long	sdpBndMldSnpgRxGrpSpecQueries	The value of the object sdpBndMldSnpgRxGrpSpecQueries indicates the number of MLD Group-Specific Queries received on this SDP Bind.
sdpBndMldSnpgRxSrcSpecQueries	long	sdpBndMldSnpgRxSrcSpecQueries	The value of the object sdpBndMldSnpgRxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries received on this SDP Bind.
sdpBndMldSnpgRxUnknownType	long	sdpBndMldSnpgRxUnknownType	The value of the object sdpBndMldSnpgRxUnknownType indicates the number of MLD unknown type packets received on this SDP Bind.
sdpBndMldSnpgRxV1Leaves	long	sdpBndMldSnpgRxV1Leaves	The value of the object sdpBndMldSnpgRxV1Leaves indicates the number of MLDv1 Leaves received on this SDP Bind.
sdpBndMldSnpgRxV1Reports	long	sdpBndMldSnpgRxV1Reports	The value of the object sdpBndMldSnpgRxV1Reports indicates the number of MLDv1 Reports received on this SDP Bind.
sdpBndMldSnpgRxV2Reports	long	sdpBndMldSnpgRxV2Reports	The value of the object sdpBndMldSnpgRxV2Reports indicates the number of MLDv2 Reports received on this SDP Bind.
sdpBndMldSnpgTxGenQueries	long	sdpBndMldSnpgTxGenQueries	The value of the object sdpBndMldSnpgTxGenQueries indicates the number of MLD General Queries transmitted on this SDP Bind.
sdpBndMldSnpgTxGrpSpecQueries	long	sdpBndMldSnpgTxGrpSpecQueries	The value of the object sdpBndMldSnpgTxGrpSpecQueries indicates the number of MLD Group-Specific Queries transmitted on this SDP Bind.
sdpBndMldSnpgTxSrcSpecQueries	long	sdpBndMldSnpgTxSrcSpecQueries	The value of the object sdpBndMldSnpgTxSrcSpecQueries indicates the number of MLD Group-And-Source-Specific Queries transmitted on this SDP Bind.
sdpBndMldSnpgTxV1Leaves	long	sdpBndMldSnpgTxV1Leaves	The value of the object sdpBndMldSnpgTxV1Leaves indicates the number of MLDv1 Leaves transmitted on this SDP Bind.
sdpBndMldSnpgTxV1Reports	long	sdpBndMldSnpgTxV1Reports	The value of the object sdpBndMldSnpgTxV1Reports indicates the number of MLDv1 Reports transmitted on this SDP Bind.
sdpBndMldSnpgTxV2Reports	long	sdpBndMldSnpgTxV2Reports	The value of the object sdpBndMldSnpgTxV2Reports indicates the number of MLDv2 Reports transmitted on this SDP Bind.

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5620 SAM counter name	Type	MIB counter name	Description
SitePimSnoopingStats MIB table name: TIMETRA-PIM-SNOOPING-MIB.tmnxPimSnpgGenStatsTable Monitored class: vpls.SitePimSnooping			
numSGTypes	long	tmnxPimSnpgGenStatsSGTypes	The value of tmnxPimSnpgGenStatsSGTypes indicates the number of entries in tmnxPimSnpgGrpSrcTable for which the source type is 'sg'.
numStarGTypes	long	tmnxPimSnpgGenStatsStarGTypes	The value of tmnxPimSnpgGenStatsStarGTypes indicates the number of entries in tmnxPimSnpgGrpSrcTable for which the source type is 'starG'.
SiteSourceGroupRecordPimSnoopingStats MIB table name: TIMETRA-PIM-SNOOPING-MIB.tmnxPimSnpgGrpSrcStatsTable Monitored classes: • vpls.SiteSourceGroupRecord • vpls.SitePimSnooping			
tmnxPimSnpgGrpSrcStatsFwdedOct	long	tmnxPimSnpgGrpSrcStatsFwdedOct	The value of tmnxPimSnpgGrpSrcStatsFwdedOct indicates the number of multicast octets that were forwarded to the interfaces in the outgoing interface list. tmnxPimSnpgGrpSrcIfTable lists all the interfaces in the outgoing interface list.
tmnxPimSnpgGrpSrcStatsFwdedPkts	long	tmnxPimSnpgGrpSrcStatsFwdedPkts	The value of tmnxPimSnpgGrpSrcStatsFwdedPkts indicates the number of multicast packets that were forwarded to the interfaces in the outgoing interface list. tmnxPimSnpgGrpSrcIfTable lists all the interfaces in the outgoing interface list.

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Table I-45 vrrp statistics

5620 SAM counter name	Type	MIB counter name	Description
InstanceAdditionalStats MIB table name: TIMETRA-VRRP-MIB.tmnxVrrpRouterStatsTable Monitored class: vrrp.Instance			
addressListDiscards	long	tmnxVrrpStatsAddressListDiscards	The total number of VRRP advertisement packets discarded because the address list did not match the locally configured list for the virtual router.
advertiseIntervalDiscards	long	tmnxVrrpStatsAdvertiseIntervalDiscards	The total number of VRRP advertisement packets discarded because the advertisement interval in the received packet was different than the one configured for the local virtual router.
advertiseSent	long	tmnxVrrpStatsAdvertiseSent	The total number of VRRP advertisements sent by this virtual router.

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5620 SAM counter name	Type	MIB counter name	Description
masterChanges	long	tmnxVrrpStatsMasterChanges	The value for tmnxVrrpStatsMasterChanges specifies the total number of times the virtual router has seen the master virtual router change.
preemptedEvents	long	tmnxVrrpStatsPreemptedEvents	The value for tmnxVrrpStatsPreemptedEvents specifies the total number of times the virtual router has been preempted by another non-owner master with higher priority.
preemptEvents	long	tmnxVrrpStatsPreemptEvents	The value for tmnxVrrpStatsPreemptEvents specifies the total number of times the virtual router has preempted another non-owner master with lower priority.
totalDiscards	long	tmnxVrrpStatsTotalDiscards	The total number of VRRP advertisement packets discarded for any reason. This includes the packets discarded due to advertise interval mismatch and address list mismatch.
InstanceStats MIB table name: VRRP-MIB.vrrpRouterStatsTable Monitored class: vrrp.Instance			
addressListErrors	long	vrrpStatsAddressListErrors	The total number of packets received for which the address list does not match the locally configured list for the virtual router.
advertiseIntervalErrors	long	vrrpStatsAdvertiseIntervalErrors	The total number of VRRP advertisement packets received for which the advertisement interval is different than the one configured for the local virtual router.
advertiseRcvd	long	vrrpStatsAdvertiseRcvd	The total number of VRRP advertisements received by this virtual router.
authFailures	long	vrrpStatsAuthFailures	The total number of VRRP packets received that do not pass the authentication check.
authTypeMismatch	long	vrrpStatsAuthTypeMismatch	The total number of packets received with 'Auth Type' not equal to the locally configured authentication method (`vrrpOperAuthType').
becomeMaster	long	vrrpStatsBecomeMaster	The total number of times that this virtual router's state has transitioned to MASTER.
invalidAuthType	long	vrrpStatsInvalidAuthType	The total number of packets received with an unknown authentication type.
invalidTypePktsRcvd	long	vrrpStatsInvalidTypePktsRcvd	The number of VRRP packets received by the virtual router with an invalid value in the 'type' field.
ipTtlErrors	long	vrrpStatsIpTtlErrors	The total number of VRRP packets received by the virtual router with IP TTL (Time-To-Live) not equal to 255.

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5620 SAM counter name	Type	MIB counter name	Description
packetLengthErrors	long	vrrpStatsPacketLengthErrors	The total number of packets received with a packet length less than the length of the VRRP header.
priorityZeroPktsRcvd	long	vrrpStatsPriorityZeroPktsRcvd	The total number of VRRP packets received by the virtual router with a priority of '0'.
priorityZeroPktsSent	long	vrrpStatsPriorityZeroPktsSent	The total number of VRRP packets sent by the virtual router with a priority of '0'.
InstanceV6AdditionalStats MIB table name: TIMETRA-VRRP-MIB.tVrrpRtrStatisticsTable Monitored class: vrrp.InstanceV6			
advertiseIntervalDiscards	long	tVrrpStatAdvIntvlDiscards	The value of tVrrpStatAdvIntvlDiscards indicates the total number of VRRP advertisement packets discarded because the advertisement interval in the received packet was different than the one configured for the local virtual router.
advertiseSent	long	tVrrpStatAdvertiseSent	The value of tVrrpStatAdvertiseSent indicates the total number of VRRP advertisements sent by this virtual router.
masterChanges	long	tVrrpStatMasterChanges	The value for tVrrpStatMasterChanges indicates the total number of times the virtual router has seen the master virtual router change.
preemptedEvents	long	tVrrpStatPreemptedEvents	The value for tVrrpStatPreemptedEvents indicates the total number of times the virtual router has been preempted by another non-owner master with higher priority.
preemptEvents	long	tVrrpStatPreemptEvents	The value for tVrrpStatPreemptEvents indicates the total number of times the virtual router has preempted another non-owner master with lower priority.
totalDiscards	long	tVrrpStatTotalDiscards	The value of tVrrpStatTotalDiscards indicates the total number of VRRP advertisement packets discarded for any reason. This includes the packets discarded due to advertise interval mismatch and address list mismatch.
InstanceV6Stats MIB table name: TIMETRA-VRRP-V3-MIB.vrrpRouterStatisticsTable Monitored class: vrrp.InstanceV6			
addressListErrors	long	vrrpStatisticsAddressListErrors	The total number of packets received for which the address list does not match the locally configured list for the virtual router. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
advertiseIntervalErrors	long	vrrpStatisticsAdvIntervalErrors	The total number of VRRP advertisement packets received for which the advertisement interval is different than the one configured for the local virtual router. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.
advertiseRcvd	long	vrrpStatisticsRcvdAdvertisements	The total number of VRRP advertisements received by this virtual router. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.
becomeMaster	long	vrrpStatisticsMasterTransitions	The total number of times that this virtual router's state has transitioned to MASTER. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.
invalidAuthType	long	vrrpStatisticsRcvdInvalidAuthentications	The total number of packets received with an unknown authentication type. REFERENCE RFC3768 Section 5.3.6.
invalidTypePktsRcvd	long	vrrpStatisticsRcvdInvalidTypePkts	The number of VRRP packets received by the virtual router with an invalid value in the 'type' field. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.
ipTtlErrors	long	vrrpStatisticsIpTtlErrors	The total number of VRRP packets received by the Virtual router with IPv4 TTL (for VRRP over IPv4) or IPv6 Hop Limit (for VRRP over IPv6) not equal to 255. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime. REFERENCE RFC3768 Section 5.2.3.
packetLengthErrors	long	vrrpStatisticsPacketLengthErrors	The total number of packets received with a packet length less than the length of the VRRP header. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
priorityZeroPktsRcvd	long	vrrpStatisticsRcvdPriZero Packets	The total number of VRRP packets received by the virtual router with a priority of '0'. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime. REFERENCE RFC3768 Section 5.3.4.
priorityZeroPktsSent	long	vrrpStatisticsSentPriZero Packets	The total number of VRRP packets sent by the virtual router with a priority of '0'. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of vrrpStatisticsDiscontinuityTime. REFERENCE RFC3768 Section 5.3.4.

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J. 9500 MPR statistics counters

J.1 9500 MPR statistics counters J-2

J.1 9500 MPR statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for the following 9500 MPR releases:

- 1.2
- 1.2.1
- 1.2.2
- 2.0



Note 1 — The 5620 SAM supports E1 statistics collection only on ETSI Release 1.2.1 and later of the 9500 MPR.

Note 2 — The 5620 SAM does not support DS1 statistics collection on ANSI Release 2.0 of the 9500 MPR, or on other releases when EAS ports 5 to 8 are in MPT mode.

Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.



Note 1 — The tables list the 5620 SAM-supported statistics counters for the current release of the device. Counters that are supported for a previous device release, but not for the current release, are not listed.

Note 2 — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table J-1 lists each statistics package and the associated statistics-counter table.

Table J-1 Statistics packages and counter tables

Package name	See
ethernetequipment	Table J-2
radioequipment	Table J-3
tdmequipment	Table J-4

Table J-2 ethernetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AggrMaintRxStats MIB table name: OPTICSIM-ETHPM-MIB.ethAggrMaintRxTable Monitored class: equipment.PhysicalPort			
aggrMaintRxRetrievingTime	long	ethAggrMaintRxRetrievingTime	See Textual Conventions.
aggrMaintRxTDF	UINT128	ethAggrMaintRxTDF	Total number of Ethernet frames which where choosen to be discarded due to buffer congestion.
aggrMaintRxTRCF	UINT128	ethAggrMaintRxTRCF	The number of Ethernet frames received correctly by the Virtual Ethernet Interface.
aggrMaintRxTRCFBroadcast	UINT128	ethAggrMaintRxTRCFBroadcast	The total number of good packets received that were directed to the broadcast address. Note that this does not include multicast packets. This behavior is the same performed by the counter etherStatsBroadcastPkts in the IETF RMON-MIB published as RFC 2819.
aggrMaintRxTRCFMulticast	UINT128	ethAggrMaintRxTRCFMulticast	The total number of good packets received that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address. This behavior is the same performed by the counter etherStatsMulticastPkts in the IETF RMON-MIB published as RFC 2819.
aggrMaintRxTRCFUnicast	UINT128	ethAggrMaintRxTRCFUnicast	The number of Ethernet Unicast frames received correctly by the Virtual Ethernet Interface.
aggrMaintRxTRCO	UINT128	ethAggrMaintRxTRCO	The number of octets of Ethernet frames received correctly by the Virtual Ethernet Interface, including Ethernet headers characters.
aggrMaintRxTRSEF	UINT128	ethAggrMaintRxTRSEF	This object is the sum of three contributions dot3StatsAlignmentErrors, dot3StatsFCSErrors and dot3StatsFrameTooLongs.
AggrMaintTxStats MIB table name: OPTICSIM-ETHPM-MIB.ethAggrMaintTxTable Monitored class: equipment.PhysicalPort			
aggrMaintTxRetrievingTime	long	ethAggrMaintTxRetrievingTime	See Textual Conventions.
aggrMaintTxTDF	UINT128	ethAggrMaintTxTDF	Total number of Ethernet frames which where choosen to be discarded due to buffer congestion.
aggrMaintTxTTF	UINT128	ethAggrMaintTxTTF	The number of Ethernet frames transmitted out by the Virtual Ethernet Interface.

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5620 SAM counter name	Type	MIB counter name	Description
aggrMaintTxTTFBroadcast	UINT128	ethAggrMaintTxTTFBroadcast	The number of good packets transmitted by this address that were directed to the broadcast address. This behavior is the same performed by the counter hostOutBroadcastPkts in the IETF RMON-MIB published as RFC 2819.
aggrMaintTxTTFMulticast	UINT128	ethAggrMaintTxTTFMulticast	The number of good packets transmitted by this address that were directed to a multicast address. Note that this number does not include packets directed to the broadcast address. This behavior is the same performed by the counter hostOutMulticastPkts in the IETF RMON-MIB published as RFC 2819.
aggrMaintTxTTFUnicast	UINT128	ethAggrMaintTxTTFUnicast	The number of Ethernet Unicast frames transmitted out by the Virtual Ethernet Interface.
aggrMaintTxTTO	UINT128	ethAggrMaintTxTTO	The number of octets of Ethernet frames transmitted out by the Virtual Ethernet Interface, including Ethernet headers characters.

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Table J-3 radioequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
AdaptiveModulationCurrentDataStats MIB table name: OPTICSIM-RADIO-PM-MIB.opticsIMAdaptiveModulationCurrentDataTable Monitored class: equipment.PhysicalPort			
adaptiveModulationCDElapsedTime	long	pmAdaptiveModulationCDElapsedTime	See Textual Conventions.
adaptiveModulationCDSuspectIntervalFlag	long	pmAdaptiveModulationCDSuspectIntervalFlag	See Textual Conventions. DEFVAL {1} -- True.
adaptiveModulationCDUsageTime16QAM	long	pmAdaptiveModulationCDUsageTime16QAM	The number of time unit (in ms) where the system is worked in 16QAM. DEFVAL {0}.
adaptiveModulationCDUsageTime4QAM	long	pmAdaptiveModulationCDUsageTime4QAM	The number of time unit (in ms) where the system is worked in 4QAM. DEFVAL {0}.
adaptiveModulationCDUsageTime64QAM	long	pmAdaptiveModulationCDUsageTime64QAM	The number of time unit (in ms) where the system is worked in 64QAM. DEFVAL {0}.
AdaptiveModulationCurrentDataStats15Min MIB table name: OPTICSIM-RADIO-PM-MIB.opticsIMAdaptiveModulationCurrentDataTable Monitored class: equipment.PhysicalPort			
adaptiveModulationCDGranularityPeriod	long	pmAdaptiveModulationCDGranularityPeriod	See Textual Conventions.
AdaptiveModulationCurrentDataStats24Hr MIB table name: OPTICSIM-RADIO-PM-MIB.opticsIMAdaptiveModulationCurrentDataTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
adaptiveModulationCDGranularityPeriod	long	pmAdaptiveModulationCDGranularityPeriod	See Textual Conventions.
AdaptiveModulationHistoryDataStats MIB table name: OPTICSIM-RADIO-PM-MIB.opticsIMAdaptiveModulationHistoryDataTable Monitored class: equipment.PhysicalPort			
adaptiveModulationHDElapsedTime	long	pmAdaptiveModulationHDElapsedTime	See Textual Conventions.
adaptiveModulationHDSuspectIntervalFlag	long	pmAdaptiveModulationHDSuspectIntervalFlag	See Textual Conventions.
adaptiveModulationHDUsageTime16QAM	long	pmAdaptiveModulationHDUsageTime16QAM	The number of time unit (in ms) where the system is worked in 16QAM.
adaptiveModulationHDUsageTime4QAM	long	pmAdaptiveModulationHDUsageTime4QAM	The number of time unit (in ms) where the system is worked in 4QAM.
adaptiveModulationHDUsageTime64QAM	long	pmAdaptiveModulationHDUsageTime64QAM	The number of time unit (in ms) where the system is worked in 64QAM.
AdaptiveModulationHistoryDataStats15Min MIB table name: OPTICSIM-RADIO-PM-MIB.opticsIMAdaptiveModulationHistoryDataTable Monitored class: equipment.PhysicalPort			
adaptiveModulationHDGranularityPeriod	long	pmAdaptiveModulationHDGranularityPeriod	See Textual Conventions.
AdaptiveModulationHistoryDataStats24Hr MIB table name: OPTICSIM-RADIO-PM-MIB.opticsIMAdaptiveModulationHistoryDataTable Monitored class: equipment.PhysicalPort			
adaptiveModulationHDGranularityPeriod	long	pmAdaptiveModulationHDGranularityPeriod	See Textual Conventions.
AggrPerQueueMaintStats MIB table name: OPTICSIM-ETHPM-MIB.ethAggrPerQueueMaintTable Monitored class: equipment.PhysicalPort			
aggrPerQueueMaintDiscardTCF	UINT128	ethAggrPerQueueMaintDiscardTCF	The number of Discarded Ethernet conforming frames(green) accepted by the specific queue of this Ethernet interface.
aggrPerQueueMaintTCF	UINT128	ethAggrPerQueueMaintTCF	The number of Ethernet conforming frames(green) accepted by the specific queue of this Ethernet interface.
aggrPerQueueMaintTCO	UINT128	ethAggrPerQueueMaintTCO	The number of Ethernet conforming octets (green) accepted by the specific queue of this Ethernet interface.
PdhFrameHopCurrentDataStats MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameHopCurrentDataTable Monitored class: equipment.PhysicalPort			
pdhFrameHopCDBbe	long	pmPdhFrameHopCDBbe	The number of BBE. DEFVAL {0}.
pdhFrameHopCDElapsedTime	long	pmPdhFrameHopCDElapsedTime	See Textual Conventions.
pdhFrameHopCDEs	long	pmPdhFrameHopCDEs	The number of ES. DEFVAL {0}.
pdhFrameHopCDMaxSuppressedIntervals	long	pmPdhFrameHopCDMaxSuppressedIntervals	See Textual Conventions.

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5620 SAM counter name	Type	MIB counter name	Description
pdhFrameHopCDNumSuppressedIntervals	long	pmPdhFrameHopCDNumSuppressedIntervals	See Textual Conventions.
pdhFrameHopCDSes	long	pmPdhFrameHopCDSes	The number of SES. DEFVAL {0}.
pdhFrameHopCDSuspectIntervalFlag	long	pmPdhFrameHopCDSuspectIntervalFlag	See Textual Conventions DEFVAL {1} -- True.
pdhFrameHopCDUas	long	pmPdhFrameHopCDUas	The number of UAS. DEFVAL {0}.
PdhFrameHopCurrentDataStats15Min MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameHopCurrentDataTable Monitored class: equipment.PhysicalPort			
pdhFrameHopCDGranularityPeriod	long	pmPdhFrameHopCDGranularityPeriod	See Textual Conventions.
PdhFrameHopCurrentDataStats24Hr MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameHopCurrentDataTable Monitored class: equipment.PhysicalPort			
pdhFrameHopCDGranularityPeriod	long	pmPdhFrameHopCDGranularityPeriod	See Textual Conventions.
PdhFrameHopHistoryDataStats MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameHopHistoryDataTable Monitored class: equipment.PhysicalPort			
pdhFrameHopHDBbe	long	pmPdhFrameHopHDBbe	The number of BBE.
pdhFrameHopHDElapsedTime	long	pmPdhFrameHopHDElapsedTime	See Textual Conventions.
pdhFrameHopHDEs	long	pmPdhFrameHopHDEs	The number of ES.
pdhFrameHopHDNumSuppressedIntervals	long	pmPdhFrameHopHDNumSuppressedIntervals	See Textual Conventions.
pdhFrameHopHDSes	long	pmPdhFrameHopHDSes	The number of SES.
pdhFrameHopHDSuspectIntervalFlag	long	pmPdhFrameHopHDSuspectIntervalFlag	See Textual Conventions.
pdhFrameHopHDUas	long	pmPdhFrameHopHDUas	The number of UAS.
PdhFrameHopHistoryDataStats15Min MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameHopHistoryDataTable Monitored class: equipment.PhysicalPort			
pdhFrameHopHDGranularityPeriod	long	pmPdhFrameHopHDGranularityPeriod	See Textual Conventions.
PdhFrameHopHistoryDataStats24Hr MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameHopHistoryDataTable Monitored class: equipment.PhysicalPort			
pdhFrameHopHDGranularityPeriod	long	pmPdhFrameHopHDGranularityPeriod	See Textual Conventions.
PdhFrameLinkCurrentDataStats MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameLinkCurrentDataTable Monitored class: equipment.PhysicalPort			
pdhFrameLinkCDBbe	long	pmPdhFrameLinkCDBbe	The number of BBE. DEFVAL {0}.

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5620 SAM counter name	Type	MIB counter name	Description
pdhFrameLinkCDElapsedTime	long	pmPdhFrameLinkCDElapsedTime	See Textual Conventions.
pdhFrameLinkCDEs	long	pmPdhFrameLinkCDEs	The number of ES. DEFVAL {0}.
pdhFrameLinkCDMaxSuppressedIntervals	long	pmPdhFrameLinkCDMaxSuppressedIntervals	See Textual Conventions.
pdhFrameLinkCDNumSuppressedIntervals	long	pmPdhFrameLinkCDNumSuppressedIntervals	See Textual Conventions.
pdhFrameLinkCDSes	long	pmPdhFrameLinkCDSes	The number of SES. DEFVAL {0}.
pdhFrameLinkCDSuspectIntervalFlag	long	pmPdhFrameLinkCDSuspectIntervalFlag	See Textual Conventions. DEFVAL {1} -- True.
pdhFrameLinkCDUas	long	pmPdhFrameLinkCDUas	The number of UAS. DEFVAL {0}.
PdhFrameLinkCurrentDataStats15Min MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameLinkCurrentDataTable Monitored class: equipment.PhysicalPort			
pdhFrameLinkCDGranularityPeriod	long	pmPdhFrameLinkCDGranularityPeriod	See Textual Conventions.
PdhFrameLinkCurrentDataStats24Hr MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameLinkCurrentDataTable Monitored class: equipment.PhysicalPort			
pdhFrameLinkCDGranularityPeriod	long	pmPdhFrameLinkCDGranularityPeriod	See Textual Conventions.
PdhFrameLinkHistoryDataStats MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameLinkHistoryDataTable Monitored class: equipment.PhysicalPort			
pdhFrameLinkHDBbe	long	pmPdhFrameLinkHDBbe	The number of BBE.
pdhFrameLinkHDElapsedTime	long	pmPdhFrameLinkHDElapsedTime	See Textual Conventions.
pdhFrameLinkHDEs	long	pmPdhFrameLinkHDEs	The number of ES.
pdhFrameLinkHDNumSuppressedIntervals	long	pmPdhFrameLinkHDNumSuppressedIntervals	See Textual Conventions.
pdhFrameLinkHDSes	long	pmPdhFrameLinkHDSes	The number of SES.
pdhFrameLinkHDSuspectIntervalFlag	long	pmPdhFrameLinkHDSuspectIntervalFlag	See Textual Conventions.
pdhFrameLinkHDUas	long	pmPdhFrameLinkHDUas	The number of UAS.
PdhFrameLinkHistoryDataStats15Min MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameLinkHistoryDataTable Monitored class: equipment.PhysicalPort			
pdhFrameLinkHDGranularityPeriod	long	pmPdhFrameLinkHDGranularityPeriod	See Textual Conventions.
PdhFrameLinkHistoryDataStats24Hr MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMPdhFrameLinkHistoryDataTable Monitored class: equipment.PhysicalPort			
pdhFrameLinkHDGranularityPeriod	long	pmPdhFrameLinkHDGranularityPeriod	See Textual Conventions.

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Table J-4 tdmequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
DS1CurrentDataStats MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMDs1CurrentDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			
ds1CDElapsedTime	long	pmDs1CDElapsedTime	See Textual Conventions.
ds1CDEs	long	pmDs1CDEs	The number of ES. DEFVAL {0}.
ds1CDMaxSuppressedIntervals	long	pmDs1CDMaxSuppressedIntervals	See Textual Conventions.
ds1CDNumSuppressedIntervals	long	pmDs1CDNumSuppressedIntervals	See Textual Conventions.
ds1CDSes	long	pmDs1CDSes	The number of SES. DEFVAL {0}.
ds1CDSuspectIntervalFlag	long	pmDs1CDSuspectIntervalFlag	See Textual Conventions DEFVAL {1} -- True.
ds1CDUas	long	pmDs1CDUas	The number of UAS. DEFVAL {0}.
DS1HistoryDataStats MIB table name: OPTICSIM-PDH-PM-MIB.opticsIMDs1HistoryDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			
ds1HDElapsedTime	long	pmDs1HDElapsedTime	See Textual Conventions.
ds1HDEs	long	pmDs1HDEs	The number of ES.
ds1HDNumSuppressedIntervals	long	pmDs1HDNumSuppressedIntervals	See Textual Conventions.
ds1HDSes	long	pmDs1HDSes	The number of SES.
ds1HDSuspectIntervalFlag	long	pmDs1HDSuspectIntervalFlag	See Textual Conventions.
ds1HDUas	long	pmDs1HDUas	The number of UAS.
E1CurrentDataStats MIB table name: OPTICSIM-PDH-PM-MIB.opticsIME1CurrentDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			
e1CDBbe	long	pmE1CDBbe	The number of BBE. DEFVAL {0}.
e1CDElapsedTime	long	pmE1CDElapsedTime	See Textual Conventions.
e1CDEs	long	pmE1CDEs	The number of ES. DEFVAL {0}.
e1CDMaxSuppressedIntervals	long	pmE1CDMaxSuppressedIntervals	See Textual Conventions.
e1CDNumSuppressedIntervals	long	pmE1CDNumSuppressedIntervals	See Textual Conventions.
e1CDSes	long	pmE1CDSes	The number of SES. DEFVAL {0}.
e1CDSuspectIntervalFlag	long	pmE1CDSuspectIntervalFlag	See Textual Conventions DEFVAL {1} -- True.
e1CDUas	long	pmE1CDUas	The number of UAS. DEFVAL {0}.
E1CurrentStats15minIn MIB table name: OPTICSIM-PDH-PM-MIB.opticsIME1CurrentDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			

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5620 SAM counter name	Type	MIB counter name	Description
e1CDGranularityPeriod	long	pmE1CDGranularityPeriod	See Textual Conventions.
E1CurrentStats15minOut MIB table name: OPTICSIM-PDH-PM-MIB.opticsIME1CurrentDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			
e1CDGranularityPeriod	long	pmE1CDGranularityPeriod	See Textual Conventions.
E1CurrentStats24hrIn MIB table name: OPTICSIM-PDH-PM-MIB.opticsIME1CurrentDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			
e1CDGranularityPeriod	long	pmE1CDGranularityPeriod	See Textual Conventions.
E1CurrentStats24hrOut MIB table name: OPTICSIM-PDH-PM-MIB.opticsIME1CurrentDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			
e1CDGranularityPeriod	long	pmE1CDGranularityPeriod	See Textual Conventions.
E1HistoryDataStats MIB table name: OPTICSIM-PDH-PM-MIB.opticsIME1HistoryDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			
e1HDBbe	long	pmE1HDBbe	The number of BBE.
e1HDElapsedTime	long	pmE1HDElapsedTime	See Textual Conventions.
e1HDEs	long	pmE1HDEs	The number of ES.
e1HDNumSuppressedIntervals	long	pmE1HDNumSuppressedIntervals	See Textual Conventions.
e1HDSes	long	pmE1HDSes	The number of SES.
e1HDSuspectIntervalFlag	long	pmE1HDSuspectIntervalFlag	See Textual Conventions.
e1HDUas	long	pmE1HDUas	The number of UAS.
E1HistoryStats15minIn MIB table name: OPTICSIM-PDH-PM-MIB.opticsIME1HistoryDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			
e1HDGranularityPeriod	long	pmE1HDGranularityPeriod	See Textual Conventions.
E1HistoryStats15minOut MIB table name: OPTICSIM-PDH-PM-MIB.opticsIME1HistoryDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			
e1HDGranularityPeriod	long	pmE1HDGranularityPeriod	See Textual Conventions.
E1HistoryStats24hrIn MIB table name: OPTICSIM-PDH-PM-MIB.opticsIME1HistoryDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			
e1HDGranularityPeriod	long	pmE1HDGranularityPeriod	See Textual Conventions.

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5620 SAM counter name	Type	MIB counter name	Description
E1HistoryStats24hrOut MIB table name: OPTICSIM-PDH-PM-MIB.opticsIME1HistoryDataTable Monitored class: tdmequipment.DS1E1PortSpecifics			
e1HDGranularityPeriod	long	pmE1HDGranularityPeriod	See Textual Conventions.

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K. Generic NE statistics counters

K.1 Generic NE statistics counters K-2

K.1 Generic NE statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for generic NEs. Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.



Note — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table K-1 lists each statistics package and the associated statistics-counter table.

Table K-1 Statistics packages and counter tables

Package name	See
bgp	Table K-2
genericne	Table K-3
igmp	Table K-4
ldp	Table K-5
ospf	Table K-6

Table K-2 bgp statistics

5620 SAM counter name	Type	MIB counter name	Description
PeerAdditionalStats MIB table name: BGP4-MIB.bgpPeerTable Monitored class: bgp.Peer			
fsmEstablishedTime	long	bgpPeerFsmEstablishedTime	This timer indicates how long (in seconds) this peer has been in the Established state or how long since this peer was last in the Established state. It is set to zero when a new peer is configured or the router is booted.
PeerGNEStats MIB table name: BGP4-MIB.bgpPeerTable Monitored class: bgp.Peer			

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5620 SAM counter name	Type	MIB counter name	Description
fsmEstablishedTransitions	long	bgpPeerFsmEstablishedTransitions	The total number of times the BGP FSM transitioned into the established state.
inTotalMessages	long	bgpPeerInTotalMessages	The total number of messages received from the remote peer on this connection. This object should be initialized to zero when the connection is established.
inUpdates	long	bgpPeerInUpdates	The number of BGP UPDATE messages received on this connection. This object should be initialized to zero (0) when the connection is established.
outTotalMessages	long	bgpPeerOutTotalMessages	The total number of messages transmitted to the remote peer on this connection. This object should be initialized to zero when the connection is established.
outUpdates	long	bgpPeerOutUpdates	The number of BGP UPDATE messages transmitted on this connection. This object should be initialized to zero (0) when the connection is established.

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Table K-3 genericne statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceAdditionalStats MIB table name: IF-MIB.ifXTable Monitored class: genericne.GenericNeInterface			
receivedBroadcastPackets	UINT128	ifHCInBroadcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of ifInBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedMulticastPackets	UINT128	ifHCInMulticastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifInMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedTotalOctets	UINT128	ifHCInOctets	The total number of octets received on the interface, including framing characters. This object is a 64-bit version of ifInOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	UINT128	ifHCInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of ifInUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedBroadcastPackets	UINT128	ifHCOutBroadcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedMulticastPackets	UINT128	ifHCOutMulticastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifOutMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedTotalOctets	UINT128	ifHCOutOctets	The total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of ifOutOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedUnicastPackets	UINT128	ifHCOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
InterfaceStats MIB table name: IF-MIB.ifTable Monitored class: genericne.GenericNeInterface			
outboundBadPackets	long	ifOutErrors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
outboundPacketsDiscarded	long	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedBadPackets	long	ifInErrors	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character- oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedOctets	long	ifInOctets	The total number of octets received on the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedPacketsDiscarded	long	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	long	ifInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnknownProtocolPackets	long	ifInUnknownProtos	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedOctets	long	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	long	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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Table K-4 igmp statistics

5620 SAM counter name	Type	MIB counter name	Description
InterfaceGNEStats MIB table name: IGMP-STD-MIB.igmpInterfaceTable Monitored class: igmp.Interface			
rxGenQueries	long	igmpInterfaceJoins	The number of times a group membership has been added on this interface; that is, the number of times an entry for this interface has been added to the Cache Table. This object gives an indication of the amount of IGMP activity over the lifetime of the row entry.
rxWrongVersions	long	igmpInterfaceWrongVersionQueries	The number of queries received whose IGMP version does not match igmpInterfaceVersion, over the lifetime of the row entry. IGMP requires that all routers on a LAN be configured to run the same version of IGMP. Thus, if any queries are received with the wrong version, this indicates a configuration error.

Table K-5 ldp statistics

5620 SAM counter name	Type	MIB counter name	Description
TargetedPeerGNEStats MIB table name: MPLS-LDP-STD-MIB.mplsLdpEntityStatsTable Monitored class: ldp.TargetedPeer			
statsBadLdpIdentifierErrors	long	mplsLdpEntityStatsBadLdpIdentifierErrors	This object counts the number of Bad LDP Identifier Fatal Errors detected by the session(s) (past and present) associated with this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime. REFERENCE RFC3036, LDP Specification, Section 3.5.1.2.
statsBadMessageLengthErrors	long	mplsLdpEntityStatsBadMessageLengthErrors	This object counts the number of Bad Message Length Fatal Errors detected by the session(s) (past and present) associated with this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime. REFERENCE RFC3036, LDP Specification, Section 3.5.1.2.

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5620 SAM counter name	Type	MIB counter name	Description
statsBadPduLengthErrors	long	mplsLdpEntityStatsBadPduLengthErrors	This object counts the number of Bad PDU Length Fatal Errors detected by the session(s) (past and present) associated with this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime. REFERENCE RFC3036, LDP Specification, Section 3.5.1.2.
statsBadTlvLengthErrors	long	mplsLdpEntityStatsBadTlvLengthErrors	This object counts the number of Bad TLV Length Fatal Errors detected by the session(s) (past and present) associated with this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime. REFERENCE RFC3036, LDP Specification, Section 3.5.1.2.
statsKeepAliveTimerExpErrors	long	mplsLdpEntityStatsKeepAliveTimerExpErrors	This object counts the number of Session Keep Alive Timer Expired Errors detected by the session(s) (past and present) associated with this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime. REFERENCE RFC3036, LDP Specification, Section 3.5.1.2.
statsMalformedTlvValueErrors	long	mplsLdpEntityStatsMalformedTlvValueErrors	This object counts the number of Malformed TLV Value Fatal Errors detected by the session(s) (past and present) associated with this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime. REFERENCE RFC3036, LDP Specification, Section 3.5.1.2.
statsSessionAttempts	long	mplsLdpEntityStatsSessionAttempts	A count of the Session Initialization messages which were sent or received by this LDP Entity and were NAK'd. In other words, this counter counts the number of session initializations that failed. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
statsSessionRejectedAdErrors	long	mplsLdpEntityStatsSessionRejectedAdErrors	A count of the Session Rejected/Parameters Advertisement Mode Error Notification Messages sent or received by this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime.
statsSessionRejectedLRErrors	long	mplsLdpEntityStatsSessionRejectedLRErrors	A count of the Session Rejected/Parameters Label Range Notification Messages sent or received by this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime.
statsSessionRejectedMaxPduErrors	long	mplsLdpEntityStatsSessionRejectedMaxPduErrors	A count of the Session Rejected/Parameters Max Pdu Length Error Notification Messages sent or received by this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime.
statsSessionRejectedNoHelloErrors	long	mplsLdpEntityStatsSessionRejectedNoHelloErrors	A count of the Session Rejected/No Hello Error Notification Messages sent or received by this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime.
statsShutdownReceivedNotifications	long	mplsLdpEntityStatsShutdownReceivedNotifications	This object counts the number of Shutdown Notifications received related to session(s) (past and present) associated with this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime.
statsShutdownSentNotifications	long	mplsLdpEntityStatsShutdownSentNotifications	This object counts the number of Shutdown Notfications sent related to session(s) (past and present) associated with this LDP Entity. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of mplsLdpEntityDiscontinuityTime.

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Table K-6 ospf statistics

5620 SAM counter name	Type	MIB counter name	Description
AreaBasicStats MIB table name: OSPF-MIB.ospfAreaTable Monitored class: ospf.AreaSite			
totalSpfRuns	long	ospfSpfRuns	The number of times that the intra-area route table has been calculated using this area's link-state database. This is typically done using Dijkstra's algorithm.
InterfaceGeneralStats MIB table name: OSPF-MIB.ospfIfTable Monitored class: ospf.Interface			
events	long	ospfIfEvents	The number of times this OSPF interface has changed its state, or an error has occurred.
NeighborGeneralStats MIB table name: OSPF-MIB.ospfNbrTable Monitored class: ospf.Neighbor			
events	long	ospfNbrEvents	The number of times this neighbor relationship has changed state, or an error has occurred.

L. OmniSwitch Release 6.3.4 statistics counters

L.1 OmniSwitch Release 6.3.4 statistics counters L-2

L.1 OmniSwitch Release 6.3.4 statistics counters

This appendix lists in tabular form the statistics counters that the 5620 SAM supports for Release 6.3.4 of the following OmniSwitch devices:

- OS 6400
- OS 6850
- OS 6855
- OS 9600
- OS 9700
- OS 9800

Each 5620 SAM counter entry in a table contains the name and description of the corresponding device MIB counter.

The 5620 SAM counter name in a table entry is the internal counter identifier that is required for statistics retrieval through the 5620 SAM OSSI. The displayed counter name in the 5620 SAM GUI is typically an expansion of this identifier. For example, the receivedBroadcastPackets counter name in the equipment table corresponds to the Received Broadcast Packets counter name on the Log Record form for an Ethernet port.



Note 1 — The tables list the 5620 SAM-supported statistics counters for the current release of the device. Counters that are supported for a previous device release, but not for the current release, are not listed.

Note 2 — A statistics counter in the 5620 SAM GUI whose displayed name ends with “Periodic” is a counter that records the difference between the current and previous values of an associated 5620 SAM counter. The OSS equivalent name for a Periodic counter is the name of the 5620 SAM counter with a “Periodic” suffix. The tables in this appendix do not list Periodic counters.

Table L-1 lists each statistics package and the associated statistics-counter table.

Table L-1 Statistics packages and counter tables

Package name	See
equipment	Table L-2
ethernetequipment	Table L-3
lag	Table L-4
lldp	Table L-5
udprelay	Table L-6

Table L-2 equipment statistics

5620 SAM counter name	Type	MIB counter name	Description
CardHealthStats MIB table name: ALCATEL-IND1-HEALTH-MIB.healthModuleTable Monitored class: equipment.CardSlot			
cpu1HrAvg	long	healthModuleCpu1HrAvg	Average module-level CPU utilization over the last hour (percent).
cpu1HrMax	long	healthModuleCpu1HrMax	Maximum one-minute module-level CPU utilization over the last hour (percent).
cpu1MinAvg	long	healthModuleCpu1MinAvg	Average module-level CPU utilization over the last minute (percent).
cpuLatest	long	healthModuleCpuLatest	Average module-level CPU utilization over the latest sample period (percent).
memory1HrAvg	long	healthModuleMemory1HrAvg	Average module-level memory utilization over the last hour (percent).
memory1HrMax	long	healthModuleMemory1HrMax	Maximum one-minute module-level memory utilization over the last hour (percent).
memory1MinAvg	long	healthModuleMemory1MinAvg	Average module-level memory utilization over the last minute (percent).
memoryLatest	long	healthModuleMemoryLatest	Average module-level memory utilization over the latest sample period (percent).
rx1HrAvg	long	healthModuleRx1HrAvg	Average module-level input utilization over the last hour (percent).
rx1HrMax	long	healthModuleRx1HrMax	Maximum one-minute module-level input utilization over the last hour (percent).
rx1MinAvg	long	healthModuleRx1MinAvg	Average module-level input utilization over the last minute (percent).
rxLatest	long	healthModuleRxLatest	Average module-level input utilization over the latest sample period (percent).
rxTx1HrAvg	long	healthModuleRxTx1HrAvg	Average module-level i/o utilization over the last hour (percent).
rxTx1HrMax	long	healthModuleRxTx1HrMax	Maximum one-minute module-level i/o utilization over the last hour (percent).
rxTx1MinAvg	long	healthModuleRxTx1MinAvg	Average module-level i/o utilization over the last minute (percent).
rxTxLatest	long	healthModuleRxTxLatest	Average module-level i/o utilization over the latest sample period (percent).
InterfaceAdditionalStats MIB table name: IF-MIB.ifXTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			

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5620 SAM counter name	Type	MIB counter name	Description
receivedBroadcastPackets	UINT128	ifHCInBroadcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of ifInBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedMulticastPackets	UINT128	ifHCInMulticastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifInMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedTotalOctets	UINT128	ifHCInOctets	The total number of octets received on the interface, including framing characters. This object is a 64-bit version of ifInOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	UINT128	ifHCInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of ifInUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedBroadcastPackets	UINT128	ifHCOutBroadcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutBroadcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
transmittedMulticastPackets	UINT128	ifHCOutMulticastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of ifOutMulticastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedTotalOctets	UINT128	ifHCOutOctets	The total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of ifOutOctets. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	UINT128	ifHCOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of ifOutUcastPkts. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
InterfaceStats MIB table name: IF-MIB.ifTable Monitored classes: equipment.PhysicalPort; equipment.ManagementPort; lag.Interface; bundle.Interface; sonetequipment.Sts1Channel; sonetequipment.Sts3Channel; sonetequipment.Sts12Channel; sonetequipment.Sts48Channel; sonetequipment.Sts192Channel; tdmequipment.DS3E3Channel; tdmequipment.DS1E1Channel; tdmequipment.DS0ChannelGroup; ccag.CcagPathCcNetSap; ccag.CcagPathCcSapNet; ccag.CcagPathCcSapSap; sonetequipment.Tu3Channel; sonetequipment.TributaryChannel			
outboundBadPackets	long	ifOutErrors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
outboundPacketsDiscarded	long	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedBadPackets	long	ifInErrors	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character- oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedOctets	long	ifInOctets	The total number of octets received on the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedPacketsDiscarded	long	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
receivedUnicastPackets	long	ifInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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5620 SAM counter name	Type	MIB counter name	Description
receivedUnknownProtocolPackets	long	ifInUnknownProtos	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedOctets	long	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.
transmittedUnicastPackets	long	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime.

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Table L-3 ethernetequipment statistics

5620 SAM counter name	Type	MIB counter name	Description
Dot3Stats MIB table name: EtherLike-MIB.dot3StatsTable Monitored class: equipment.PhysicalPort			

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5620 SAM counter name	Type	MIB counter name	Description
alignmentErrors	long	dot3StatsAlignmentErrors	A count of frames received on a particular interface that are not an integral number of octets in length and do not pass the FCS check. The count represented by an instance of this object is incremented when the alignmentError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions obtain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. This counter does not increment for 8-bit wide group encoding schemes. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.7, aAlignmentErrors.
deferredTransmissions	long	dot3StatsDeferredTransmissions	A count of frames for which the first transmission attempt on a particular interface is delayed because the medium is busy. The count represented by an instance of this object does not include frames involved in collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.9, aFramesWithDeferredXmissions.
duplex	int	dot3StatsDuplexStatus	The current mode of operation of the MAC entity. 'unknown' indicates that the current duplex mode could not be determined. Management control of the duplex mode is accomplished through the MAU MIB. When an interface does not support autonegotiation, or when autonegotiation is not enabled, the duplex mode is controlled using ifMauDefaultType. When autonegotiation is supported and enabled, duplex mode is controlled using ifMauAutoNegAdvertisedBits. In either case, the currently operating duplex mode is reflected both in this object and in ifMauType. Note that this object provides redundant information with ifMauType. Normally, redundant objects are discouraged. However, in this instance, it allows a management application to determine the duplex status of an interface without having to know every possible value of ifMauType. This was felt to be sufficiently valuable to justify the redundancy. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.32, aDuplexStatus.

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5620 SAM counter name	Type	MIB counter name	Description
excessiveCollisions	long	dot3StatsExcessiveCollisions	A count of frames for which transmission on a particular interface fails due to excessive collisions. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.11, aFramesAbortedDueToXSColls.
fcsErrors	long	dot3StatsFCSErrors	A count of frames received on a particular interface that are an integral number of octets in length but do not pass the FCS check. This count does not include frames received with frame-too-long or frame-too-short error. The count represented by an instance of this object is incremented when the frameCheckError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions obtain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. Note: Coding errors detected by the physical layer for speeds above 10 Mb/s will cause the frame to fail the FCS check. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.6, aFrameCheckSequenceErrors.
frameTooLongs	long	dot3StatsFrameTooLongs	A count of frames received on a particular interface that exceed the maximum permitted frame size. The count represented by an instance of this object is incremented when the frameTooLong status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions obtain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.25, aFrameTooLongErrors.

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5620 SAM counter name	Type	MIB counter name	Description
lateCollisions	long	dot3StatsLateCollisions	The number of times that a collision is detected on a particular interface later than one slotTime into the transmission of a packet. A (late) collision included in a count represented by an instance of this object is also considered as a (generic) collision for purposes of other collision-related statistics. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.10, aLateCollisions.
multipleCollisionFrames	long	dot3StatsMultipleCollisionFrames	A count of successfully transmitted frames on a particular interface for which transmission is inhibited by more than one collision. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsSingleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.4, aMultipleCollisionFrames.
singleCollisionFrames	long	dot3StatsSingleCollisionFrames	A count of successfully transmitted frames on a particular interface for which transmission is inhibited by exactly one collision. A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsMultipleCollisionFrames object. This counter does not increment when the interface is operating in full-duplex mode. Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime. REFERENCE [IEEE 802.3 Std.], 30.3.1.1.3, aSingleCollisionFrames.
EthernetHighCapacityStats MIB table name: ALCATEL-IND1-PORT-MIB.alcetherStatsTable Monitored classes: • equipment.PhysicalPort • equipment.ManagementPort			

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5620 SAM counter name	Type	MIB counter name	Description
crcAlignErrors	UINT128	alcetherStatsCRCAlignErrors	The total number of packets received that had a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets, inclusive, but but had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).
jabbers	UINT128	alcetherStatsRxJabbers	The total number of packets received that were longer than 1518 octets (excluding framing bits, but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Note that this definition of jabber is different than the definition in IEEE-802.3 section 8.2.1.5 (10BASE5) and section 10.3.1.4 (10BASE2). These documents define jabber as the condition where any packet exceeds 20 ms. The allowed range to detect jabber is between 20 ms and 150 ms.
oversizePackets	UINT128	alcetherStatsTxOversizePkts	The total number of packets transmitted that were longer than 1518 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.
packets1024to1518Octets	UINT128	alcetherStatsPkts1024to1518Octets	The total number of packets (including bad packets) received that were between 1024 and 1518 octets in length inclusive (excluding framing bits but including FCS octets). For both Ethernet and GigaEthernet.
packets128to255Octets	UINT128	alcetherStatsPkts128to255Octets	The total number of packets (including bad packets) received that were between 128 and 255 octets in length inclusive (excluding framing bits but including FCS octets).
packets1519to4095Octets	UINT128	gigaEtherStatsPkts1519to4095Octets	The total number of packets (including bad packets) received that were between 1519 and 4095 octets in length inclusive (excluding framing bits but including FCS octets). Only for GigaEthernet interfaces.
packets256to511Octets	UINT128	alcetherStatsPkts256to511Octets	The total number of packets (including bad packets) received that were between 256 and 511 octets in length inclusive (excluding framing bits but including FCS octets).
packets4095to9215Octets	UINT128	gigaEtherStatsPkts4096to9215Octets	The total number of packets (including bad packets) received that were between 4096 and 9215 octets in length inclusive (excluding framing bits but including FCS octets). Only for GigaEthernet interfaces.
packets512to1023Octets	UINT128	alcetherStatsPkts512to1023Octets	The total number of packets (including bad packets) received that were between 512 and 1023 octets in length inclusive (excluding framing bits but including FCS octets).

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5620 SAM counter name	Type	MIB counter name	Description
packets64Octets	UINT128	alcetherStatsPkts64Octets	The total number of packets (including bad packets) received that were 64 octets in length (excluding framing bits but including FCS octets).
packets65to127Octets	UINT128	alcetherStatsPkts65to127Octets	The total number of packets (including bad packets) received that were between 65 and 127 octets in length inclusive (excluding framing bits but including FCS octets).
rxCollisions	UINT128	alcetherStatsRxCollisions	The best estimate of the total number of collisions on this Ethernet segment (in reception). Only for Ethernet Interfaces. The value returned will depend on the location of the RMON probe. Section 8.2.1.3 (10BASE-5) and section 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision, in the receive mode, if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coax segments to which the repeater is connected.
rxUndersizePackets	UINT128	alcetherStatsRxUndersizePkts	The total number of packets received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.

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5620 SAM counter name	Type	MIB counter name	Description
txCollisions	UINT128	alcetherStatsTxCollisions	The best estimate of the total number of collisions on this Ethernet segment (in transmition). Only for Ethernet Interfaces. The value returned will depend on the location of the RMON probe. Section 8.2.1.3 (10BASE-5) and section 10.3.1.3 (10BASE-2) of IEEE standard 802.3 states that a station must detect a collision, in the receive mode, if three or more stations are transmitting simultaneously. A repeater port must detect a collision when two or more stations are transmitting simultaneously. Thus a probe placed on a repeater port could record more collisions than a probe connected to a station on the same segment would. Probe location plays a much smaller role when considering 10BASE-T. 14.2.1.4 (10BASE-T) of IEEE standard 802.3 defines a collision as the simultaneous presence of signals on the DO and RD circuits (transmitting and receiving at the same time). A 10BASE-T station can only detect collisions when it is transmitting. Thus probes placed on a station and a repeater, should report the same number of collisions. Note also that an RMON probe inside a repeater should ideally report collisions between the repeater and one or more other hosts (transmit collisions as defined by IEEE 802.3k) plus receiver collisions observed on any coax segments to which the repeater is connected.
txUndersizePackets	UINT128	alcetherStatsTxUndersizePkts	The total number of packets transmitted that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed.

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Table L-4 lag statistics

5620 SAM counter name	Type	MIB counter name	Description
LagPortStats MIB table name: ALCATEL-IND1-LAG-MIB.alclnkaggAggPortStatsTable Monitored class: lag.PortTermination			
illegalPdusReceived	long	alclnkaggAggPortStatsIllegalRx	The number of frames received that carry the Slow Protocols Ethernet Type value (), but contain a badly formed PDU or an illegal value of Protocol Subtype (). This value is read-only. REFERENCE IEEE 802.3 Subclause 30.7.3.1.6.
lacPDUsReceived	long	alclnkaggAggPortStatsLACPDUsRx	The number of valid LACPDUs received on this Aggregation Port. This value is read-only. REFERENCE IEEE 802.3 Subclause 30.7.3.1.2.

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5620 SAM counter name	Type	MIB counter name	Description
lacPdusTransmitted	long	alclnkaggAggPortStatsLACPDUsTx	The number of LACPDUs transmitted on this Aggregation Port. This value is read-only. REFERENCE IEEE 802.3 Subclause 30.7.3.1.7.
markerPDUsReceived	long	alclnkaggAggPortStatsMarkerPDUsRx	The number of valid Marker PDUs received on this Aggregation Port. This value is read-only. REFERENCE IEEE 802.3 Subclause 30.7.3.1.3.
markerPdusTransmitted	long	alclnkaggAggPortStatsMarkerPDUsTx	The number of Marker PDUs transmitted on this Aggregation Port. This value is read-only. REFERENCE IEEE 802.3 Subclause 30.7.3.1.8.
markerRspPDUsReceived	long	alclnkaggAggPortStatsMarkerResponsePDUsRx	The number of valid Marker Response PDUs received on this Aggregation Port. This value is read-only. REFERENCE IEEE 802.3 Subclause 30.7.3.1.4.
markerRspPdusTransmitted	long	alclnkaggAggPortStatsMarkerResponsePDUsTx	The number of Marker Response PDUs transmitted on this Aggregation Port. This value is read-only. REFERENCE IEEE 802.3 Subclause 30.7.3.1.9.
unknownPdusReceived	long	alclnkaggAggPortStatsUnknownRx	The number of frames received that either: - carry the Slow Protocols Ethernet Type value (), but contain an unknown PDU, or: - are addressed to the Slow Protocols group MAC Address (), but do not carry the Slow Protocols Ethernet Type. This value is read-only. REFERENCE IEEE 802.3 Subclause 30.7.3.1.5.

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Table L-5 lldp statistics

5620 SAM counter name	Type	MIB counter name	Description
LLDPRxPortStats MIB table name: LLDP-MIB.lldpStatsRxPortTable Monitored class: lldp.LLDPPortConfiguration			

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5620 SAM counter name	Type	MIB counter name	Description
lldpStatsRxPortAgeouts	long	lldpStatsRxPortAgeoutsTotal	The counter that represents the number of age-outs that occurred on a given port. An age-out is the number of times the complete set of information advertised by a particular MSAP has been deleted from tables contained in lldpRemoteSystemsData and lldpExtensions objects because the information timeliness interval has expired. This counter is similar to lldpStatsRemTablesAgeouts, except that the counter is on a per port basis. This enables NMS to poll tables associated with the lldpRemoteSystemsData objects and all LLDP extension objects associated with remote systems on the indicated port only. This counter should be set to zero during agent initialization and its value should not be saved in non-volatile storage. When a port's admin status changes from 'disabled' to 'rxOnly', 'txOnly' or 'txAndRx', the counter associated with the same port should reset to 0. The agent should also flush all remote system information associated with the same port. This counter should be incremented only once when the complete set of information is invalidated (aged out) from all related tables on a particular port. Partial aging is not allowed, and thus, should not change the value of this counter. REFERENCE IEEE 802.1AB-2005 10.5.2.2.
lldpStatsRxPortFrameDiscard	long	lldpStatsRxPortFramesDiscardedTotal	The number of LLDP frames received by this LLDP agent on the indicated port, and then discarded for any reason. This counter can provide an indication that LLDP header formating problems may exist with the local LLDP agent in the sending system or that LLDPDU validation problems may exist with the local LLDP agent in the receiving system. REFERENCE IEEE 802.1AB-2005 10.5.2.2.
lldpStatsRxPortFrameErrs	long	lldpStatsRxPortFramesErrors	The number of invalid LLDP frames received by this LLDP agent on the indicated port, while this LLDP agent is enabled. REFERENCE IEEE 802.1AB-2005 10.5.2.2.
lldpStatsRxPortFrames	long	lldpStatsRxPortFramesTotal	The number of valid LLDP frames received by this LLDP agent on the indicated port, while this LLDP agent is enabled. REFERENCE IEEE 802.1AB-2005 10.5.2.2.
lldpStatsRxPortTLVDiscard	long	lldpStatsRxPortTLVsDiscardedTotal	The number of LLDP TLVs discarded for any reason by this LLDP agent on the indicated port. REFERENCE IEEE 802.1AB-2005 10.5.2.2.

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5620 SAM counter name	Type	MIB counter name	Description
lldpStatsRxPortTLVUnknown	long	lldpStatsRxPortTLVsUnrecognizedTotal	The number of LLDP TLVs received on the given port that are not recognized by this LLDP agent on the indicated port. An unrecognized TLV is referred to as the TLV whose type value is in the range of reserved TLV types (000 1001 - 111 1110) in Table 9.1 of IEEE Std 802.1AB-2005. An unrecognized TLV may be a basic management TLV from a later LLDP version. REFERENCE IEEE 802.1AB-2005 10.5.2.2.
LLDPTxPortStats MIB table name: LLDP-MIB.lldpStatsTxPortTable Monitored class: lldp.LLDPPortConfiguration			
lldpStatsTxPortFrames	long	lldpStatsTxPortFramesTotal	The number of LLDP frames transmitted by this LLDP agent on the indicated port. REFERENCE IEEE 802.1AB-2005 10.5.2.1.

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Table L-6 udprelay statistics

5620 SAM counter name	Type	MIB counter name	Description
UDPPortStats MIB table name: ALCATEL-IND1-UDP-RELAY-MIB.iphelperDhcpSnoopingPortTable Monitored class: udprelay.DHCPSnoopingPort			
dhcpSnoopingPortBindingViolation	long	iphelperDhcpSnoopingPortBindingViolation	This keeps track of the number of packets dropped due to receiving an DHCP Relase or DHCP Decline message that contains a MAC address in the DHCP snooping binding table, but the interface information in the binding table does not match the interface on which the message was received.
dhcpSnoopingPortDhcpServerViolation	long	iphelperDhcpSnoopingPortDhcpServerViolation	This keeps track of the number of packets dropped due to receiving an DHCP server packet on a DHCP Snooping enabled port.
dhcpSnoopingPortMacAddrViolation	long	iphelperDhcpSnoopingPortMacAddrViolation	This keeps track of the number of packets dropped due to DHCP packet with the source MAC Address not equal the client DHCP Hardware address in the DHCP packet.
dhcpSnoopingPortOption82Violation	long	iphelperDhcpSnoopingPortOption82Violation	This keeps track of the number of packets dropped due to a relay agent forards a packet that includes option 82 info to an untrusted port.
dhcpSnoopingPortRelayAgentViolation	long	iphelperDhcpSnoopingPortRelayAgentViolation	This keeps track of the number of packets dropped due to an DHCP relay agent forwards a DHCP packate includes an relay agent ip address that is not 0.0.0.0.
UDPServerStats MIB table name: ALCATEL-IND1-UDP-RELAY-MIB.iphelperStatTable Monitored class: udprelay.UDPServiceDestination			

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5620 SAM counter name	Type	MIB counter name	Description
iphelperAgentInfoViolation	long	iphelperAgentInfoViolation	This keeps track of the number of packets dropped due to DHCP packet with giaddr field not equal to zero and Relay Agent Information option is present and also the Relay Agent Information Policy is set to DROP.
iphelperForwDelayViolation	long	iphelperForwDelayViolation	This keeps track of the number of packets dropped due to forward delay violation. Only meaningful for entries with ipHelperService equal to iphelperBootp(1).
iphelperInvalidAgentInfoOptFrmSrver	long	iphelperInvalidAgentInfoOptFrmSrver	This keeps track of the number of packets dropped due to invalid from DHCP server with Relay Agent Information option in the DHCP packet.
iphelperInvalidGatewayIP	long	iphelperInvalidGatewayIP	This keeps track of the number of packets dropped due to giaddr matching a local subnet and Relay Agent Information option is present in the DHCP packet.
iphelperMaxHopsViolation	long	iphelperMaxHopsViolation	This keeps track of the number of packets dropped due to max hops violation. Only meaningful for entries with ipHelperService equal to iphelperBootp(1).
iphelperRxFromClient	long	iphelperRxFromClient	This keeps track of the number of packets recieved from the client.
iphelperTxToServer	long	iphelperTxToServer	This keeps track of the number of packets transmitted to the server.
UDPServiceStats MIB table name: ALCATEL-IND1-UDP-RELAY-MIB.iphelperxStatTable Monitored class: udprelay.UDPServiceDestination			
udpRxFromClient	long	iphelperxStatRxFromClient	This keeps track of the number of packets recieved from the client.
udpTxToServer	long	iphelperxStatTxToServer	This keeps track of the number of packets transmitted to the server.
udpvlan	long	iphelperxStatVlan	This specifies the unique Vlan of the server.

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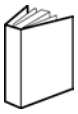
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